Looking To The Future

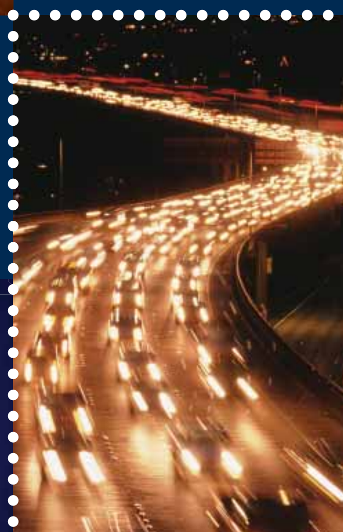
Missouri Targeted Industry Clusters





May 2007





MERIC

MISSOURI
DEPARTMENT OF ECONOMIC DEVELOPMENT

Matt Blunt
Governor

Gregory A. Steinhoff
Director

May 2007

Dear Readers,

Under the leadership of Governor Matt Blunt, the Missouri Department of Economic Development has focused its efforts on attracting and retaining good, family supporting jobs.

In Missouri we are fortunate to have many economic strengths; a workforce second to none, great schools, world renowned companies and entrepreneurs, quality communities, a low tax burden and enviable geographic and regional advantages.

Our state's economy is also among the most diversified in the United States, with significant levels of employment and output generated in a variety of industry sectors. This is indicative of a robust economy.

While we are proud of Missouri's highly diverse economy, we are also committed to building our state's future economic foundation on high-technology industries, specifically Agribusiness, Automotive, Defense/Homeland Security, Energy, Finance, Information Technology, Life Sciences, and Transportation/Logistics. Economic development theory makes it clear that we need to have a cluster strategy for success, and these particular industries hold the promise for further opportunities.

It has been said, "Opportunities multiply as they are seized." I agree and I assure you that the Department of Economic Development will remain committed to creating jobs and economic growth for the citizens of Missouri.

Sincerely,

Greg Steinhoff
Director

301 W. High St., • P.O. Box 118 • Jefferson City, MO • 65102
www.ded.mo.gov

MISSOURI
DEPARTMENT OF ECONOMIC DEVELOPMENT

Matt Blunt
Governor

Gregory A. Steinhoff
Director

Sallie Hemenway
Director of Operations

Business and Community Services

Mike Downing
Director of Promotions

May 2007

Dear Readers,

Missouri's own Mark Twain called growth "the most rigorous law of our being" and prosperity "the best protector of principle."

Today our state's economic growth and the continued prosperity of its citizens depend upon staying competitive in a global marketplace, where the rewards for initiative, innovation and entrepreneurship flow across borders.

The recipe for success in this rapidly evolving and truly international business environment is widely known but difficult to achieve.

We must build upon and invest in our state's cultural, recreational, artistic and educational resources; unique attractions; heritage; public and private services; and infrastructure.

We must provide an excellent climate for business growth, particularly industry cluster growth.

We must have talented men and women in our state whose ideas and problem-solving lead to valuable new products and services, pioneering technologies, and the industries of the future.

And we must cooperate for it is right here in the Show Me State where solutions must be developed and the challenges met.

It is at this intersection of place, industry, talent, and cooperation that we will find economic growth and prosperity.

On behalf of the Missouri Economic Research and Information Center (MERIC) I am proud to offer this informational material and overview assessment of Missouri's targeted industry clusters. In today's fast-paced global business environment, good information for sound decision-making is more than a strategic advantage -- *it's a necessity.*

Marty Romitti

Marty Romitti, Ph.D.
Director of MERIC

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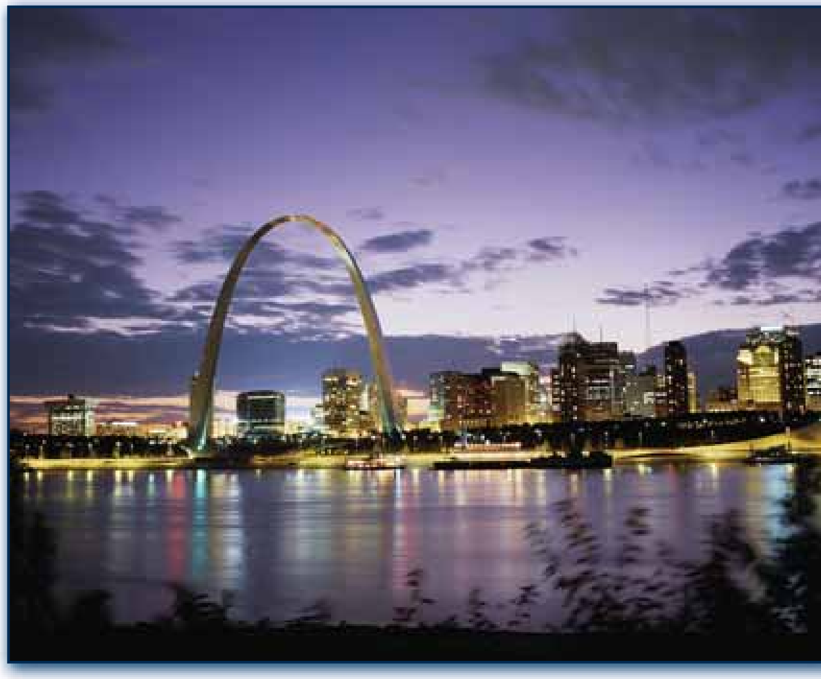
Contents

What are Industry Clusters?

An industry cluster is a group of businesses linked by core products or services. These businesses may have common supply chains, labor needs, technologies and markets. This creates a strong economic interdependence.

The Missouri Department of Economic Development identifies eight "Industry Clusters" for targeting. The clusters are based on research provided by the Missouri Economic Research and Information Center (MERIC), existing initiatives, industry strength, and future growth potential.



What is the Purpose of Identifying Targeted Industry Clusters?

By identifying targeted industries using a common definition, a framework is created allowing multiple agencies, organizations, and policy makers to work together using unified concepts. With a consistent cluster definition, information can be provided on regional employment concentrations, staffing patterns, employers, and leading firms. Issues can then be addressed in a coordinated fashion for strengthening target industries with regards to skills, education, recruitment, and incentives.

What are Missouri's Eight Targeted Industries?

- ***Agribusiness***
- ***Automotive***
- ***Defense • Homeland Security***
- ***Energy***
- ***Finance***
- ***Information Technology***
- ***Life Sciences***
- ***Transportation • Logistics***

Missouri Targeted Industry Clusters

Agribusiness

The Agribusiness cluster is comprised of industries supporting farm production (animal and crop), farm-related industries, and indirect agribusiness. Farming and supporting industries which provide input, processing, management, and marketing comprise the core elements of this cluster.

Automotive

The Automotive cluster is comprised of industries involved in the manufacturing of motor vehicles, such as buses, cars, and trailer trucks. This also includes the manufacturing of new and after-market parts for use within the design of the motor vehicle.

Defense • Homeland Security

The Defense and Homeland Security cluster is comprised of industries that supply and support local and national security. Included are defense related research activities and the manufacturing of communications equipment, ammunition, military vehicles, and aircraft/aerospace components.

Energy

The Energy cluster is defined by industries involved in the operation of power facilities, and the manufacturing of machinery and parts used in the production of energy.

Finance

The Finance cluster focuses on industries primarily engaged in the transfer, holding, and investment of money. These include Banking, Investment and Financing, Insurance, and Tax Preparations.

Information Technology

The Information Technology cluster is comprised of industries involved in the manufacturing of electronic components used in computers, communication devices, and other electronic devices. This cluster also includes planning and design of computer systems, software development, management consulting services, and research.

Life Sciences

The Life Sciences cluster focuses on industries involved in the enhancement of quality of life through psychosocial, biological, medical research and engineering. It is also comprised of chemical and medical device manufacturing.

Transportation • Logistics

The Transportation • Logistics cluster focuses on the support processes involved with the transfer of products and services. This cluster is comprised of Wholesalers, Logistical Services, Shipping Containers, Warehousing, Local Haulers, and Interstate/International Haulers.

Definition of Terms

Location Quotient

Location Quotient (LQ) measures the employment concentration of an industry within a specified area relative to the nation as a whole. It is calculated by dividing the region's industry employment share by the nation's industry employment share. A LQ of 1.00 or greater means that there is a higher concentration in the region for an industry than exists nationally. The Location Quotient is a quick guide to understanding key industries within an area, especially when coupled with employment growth trends that shift-share analysis can reveal.

What Does the Location Quotient (LQ) Mean?		
	Low Employment Growth	High Employment Growth
High LQ	Important industries that may require attention	Important growth industries
Low LQ	Industries with lower potential for local economy	Potential emerging industries

Statewide Location Quotients are provided by cluster in the summary section and in each cluster and sub-cluster section. Top industry and county Location Quotients are included in each cluster and sub-cluster section.

Shift Share Analysis

Shift Share analysis measures employment changes in an industry, cluster, or regional industry mix. It breaks out employment changes into three components: National Share (NS), Industry Mix (IM), and Regional Shift (RS).

National Share (NS)–is the share of regional employment changes attributed to factors in the national economy.

Industry Mix (IM)–identifies local industry employment changes attributed to national industry employment changes.

Regional Shift (RS)–identifies a region's lagging or leading industries. This is also considered a measure of a region's competitiveness.

The shift share analysis is provided in the summary section and in each cluster and sub-cluster section under the heading Cluster Statistics.

What is the Next Step?

Location Quotient (LQ) and Shift Share analysis are important in helping show which industries are highly concentrated in the state and how competitive they are nationally. However, they do not explain why this is the case. Some reasons for location choices may involve natural resource access, transportation networks, community average wage, and worker productivity. Surveys and interviews with industry leaders may help reveal their reasons for locating in Missouri. Additional analysis from MERIC may look at other approaches to refine these clusters, such as geospatial or productivity clusters.

An understanding of the targeted clusters is crucial to developing strategies that complement those industries and help them prosper in our state. Strategies can differ on how to best strengthen clusters. Some outcomes to focus on include:

- Recruiting more companies in a specific industry ;
- Vertically integrate by improving the supply chain or customer base;
- Fill in gaps of any critical industries restricting growth;
- Strengthen a cluster through infrastructure development, workforce development, and incentives.

Summary of Clusters

	Agribusiness	Automotive	Defense Homeland Security	Energy	Finance	Information Technology	Life Sciences	Transportation Logistics	All Clusters
Employer Units (2006)	3,040	258	348	696	9,769	2,345	1,034	12,468	29,349
Employment (2006)	88,645	36,223	16,922	20,275	132,036	38,604	31,295	175,064	519,316
Average Employment per Establishment (2006)	29	140	49	29	14	16	30	14	18
Percent of Total Missouri Jobs (2006)	3.86%	1.58%	0.74%	0.88%	5.75%	1.68%	1.36%	7.62%	22.62%
Average Annual Wages (2005)	$39,605	$54,167	$77,935	$58,053	$52,206	$70,938	$66,505	$43,374	$51,285
Location Quotient (2006)	1.19	1.65	0.78	1.29	1.04	0.79	0.91	1.05	1.06
Percent Change from 2001 Location Quotient	5.25%	3.91%	38.25%	-1.91%	-2.34%	8.69%	11.95%	0.11%	1.22%
Projected Employment Change (2011)	1.03%	-1.43%	4.61%	1.72%	0.12%	9.25%	11.41%	3.81%	2.88%
Percentage of Firms with less than 50 Employees	91%	66%	88%	93%	92%	93%	91%	94%	93%
Net Percentage Change in Jobs (2001-2006)	-8.9%	-12.2%	42.2%	-17.6%	1.4%	10.8%	17.4%	0.3%	-3.40%
Employment Change in Jobs (2001-2006) Total Change	-8,654	-5,051	5,024	-4,320	1,798	3,760	4,629	446	-18,482
Employment Change from 2001 attributed to National Factors	2,498	1,059	305	631	3,343	894	685	4,482	13,805
Employment Change from 2001 attributed to Industry Factors	-14,590	-7,066	180	-4,315	3,204	195	932	-2,178	-32,559
Employment Change from 2001 attributed to Missouri's Competitiveness	3,438	956	4,538	-637	-4,749	2,670	3,013	-1,858	272

Note: Some industries are in more than one cluster, so the sum of individual clusters will not equal the total for all clusters.

AGRI BUSINESS

Agribusiness–Definition

The Agribusiness cluster is comprised of industries supporting farm production (animal and crop), farm-related industries, and indirect agribusiness. Farming and supporting industries which provide input, processing, management, and marketing comprise the core elements of this cluster.

Missouri's Strengths

Chemical Manufacturing

The pesticide and fertilizer production industries supply much of Missouri's farm market and are key global export industries. These companies are the largest employers in the Agribusiness cluster and have seen positive growth in the last five years. Monsanto and Bayer Corporation represent Missouri businesses involved in this type of activity.

Food Manufacturing

Another large employer and exporter within the agribusiness segment in Missouri is the food manufacturing sector. These industries include meat processing, pet food manufacturing, breweries, wineries, and other food processing (dairy, soybean, and pasta). Anheuser–Busch, Conagra Foods, Kraft, Tyson, and Purina are some of the companies involved in food manufacturing.

Farm Supplies, Clothing Manufacturing, and Services

Major employers in this cluster include veterinarians and farm supply merchant wholesalers, such as MFA. Other export industries include clothing manufacturing from Missouri agricultural products, such as gloves, hats, shoes, and apparel.

Farm Production

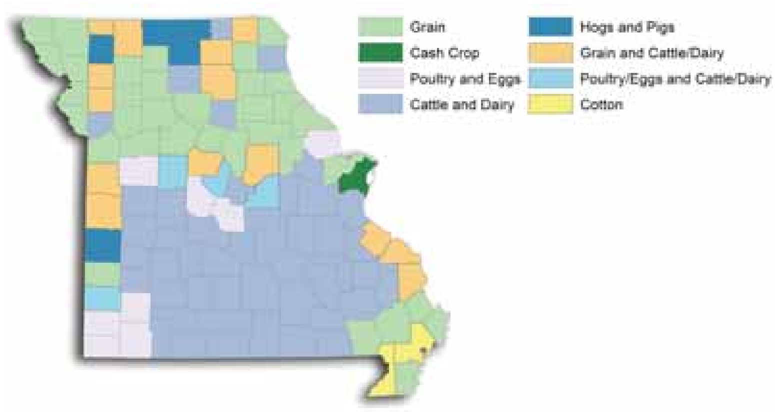
Agribusiness relies on the essential functions of crop and animal production. This group of industries encompasses more than 100,000 farms and 150,000 operators in Missouri. In terms of value of agricultural product, Missouri's farms are ranked 12th in the nation. This sector typically is not required to report employment information through the unemployment insurance system, therefore, much of the data available is estimated from census surveys.

Key Locations

The largest Agribusiness employing areas are in the St. Louis and Kansas City regions. The highest growth and export areas occur in St. Louis City and across Missouri's rural farm areas.

Factoid:

- Missouri has over 30 million acres of farmland in use; an average of 287 acres per farm.
- Of the total value of Missouri agricultural products produced, Livestock and Poultry represent 60% and Crops 40%.



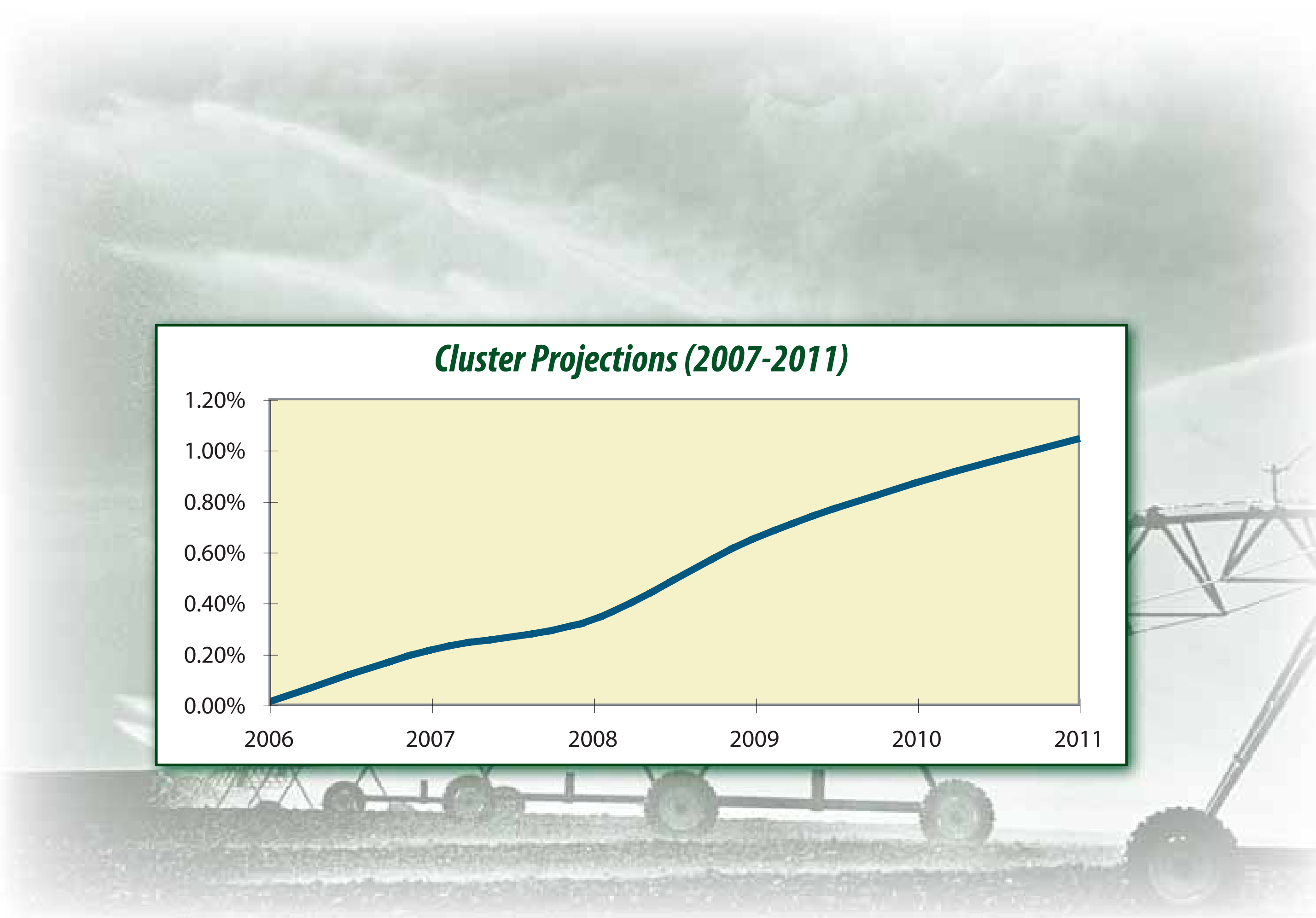
What's Next for Agribusiness?

Missouri Agriculture is a major industry for the state with over $4.9 billion in sales from approximately 105,000 farms. Over $1.5 billion in sales comes from Grains, Oilseeds, Dry Beans, and Peas. Cattle and calf sales are estimated at $1.3 billion.

The farm related and indirect agricultural businesses comprising the Agribusiness cluster are integrally associated with upcoming developments in agriculture. Programs emphasizing higher crop prices, branding, and greater exports are expected to have a positive effect on farmer incomes and bolster the supporting industries within the Agribusiness cluster.

Upcoming investments in ethanol and biodiesel plants, along with efforts to recruit feed mills, are expected to increase demand for local corn and soybean crops. The Department of Agriculture estimates increases to farmers of $.40 per corn bushel and $.12 per soybean bushel.

The increasing popularity of Farmers' Markets is expected to drive up the local production of higher value crops, such as fruits, vegetables, and organic foods. Missouri is also involved in establishing a brand and certification for its corn and cotton industry. The corn will be marketed locally to the Missouri poultry industry for feed and the pet food industry. The cotton brand is expected to attract international buyers. The production of specialty crops is another trend expected to increase export sales. Wine grapes, Adzuki beans, Tofu, and Natto Soybeans, are examples of current and future specialty crops in Missouri.



Cluster Statistics

- Number of Businesses (2006) 3,040
- Number of Jobs (2006) 88,645
- Percent of Total Missouri Jobs (2006) 3.86%
- Average Annual Wages (2005) $39,605
- Location Quotient (2006) 1.19
- Percent Change from 2001 Location Quotient 5.25%
- Percent Change in Jobs (2001-2006) .... -8.9%

- Total Change in Jobs (2001-2006) .... -8,654

Employment Change from 2001 attributed to:

- National Growth 2,498
- Industry Growth .... -14,590
- Missouri's Competitiveness 3,438

Top Five Industries

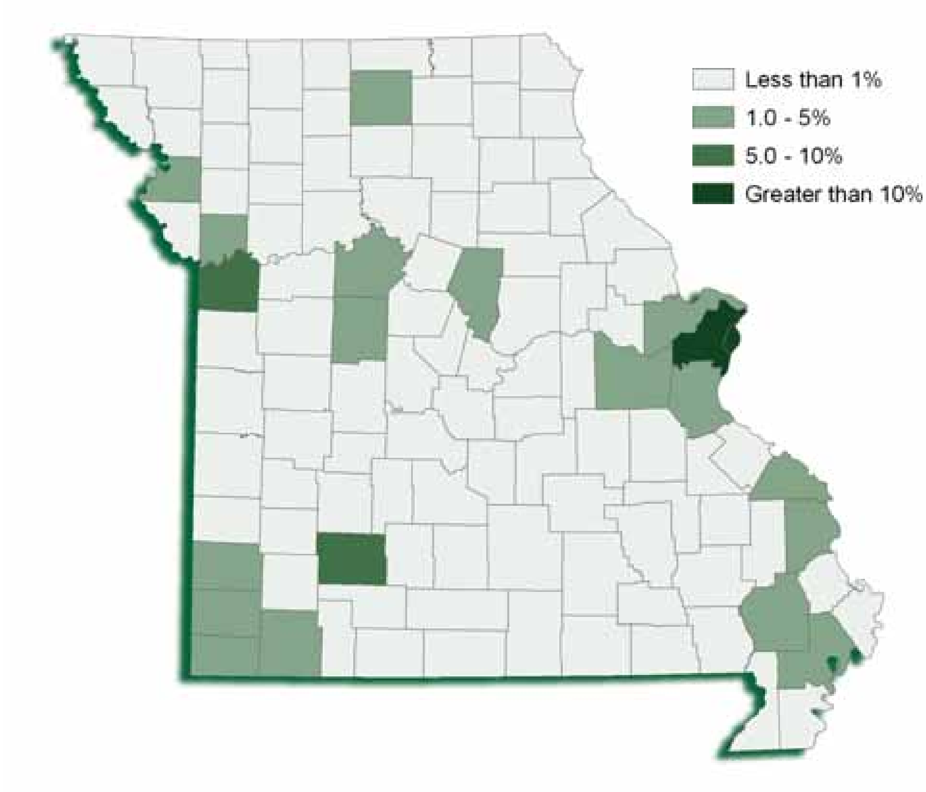
- Pesticide and other ag. chemical mfg.
- Farm supplies merchant wholesalers
- Meat processed from carcasses
- Poultry processing
- Veterinary services

26.8% of Cluster Jobs

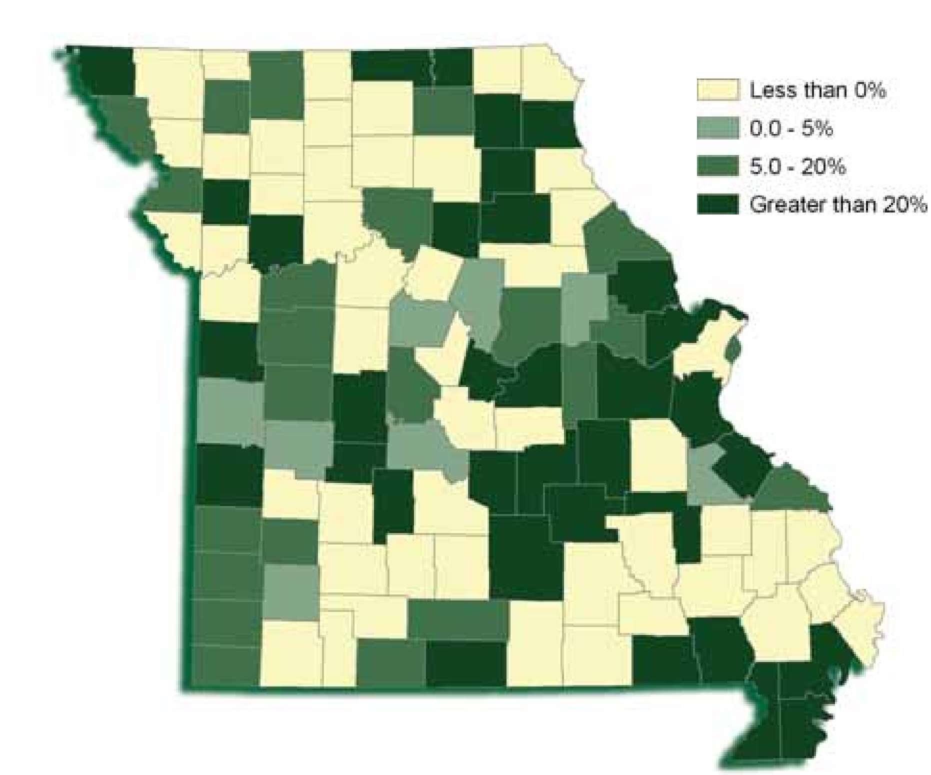
Targeted Occupations with Projected Growth and Current Wage

15% of Cluster Occupations	Current Wage	Projected Growth 2004–2014
Slaughterers and Meat Packers	$20,800	12.30%
Maintenance and Repair Workers, General	$32,410	10.30%
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Production	$54,960	9.50%
First-Line Supervisors/Managers of Production and Operating Workers	$47,950	4.40%
Team Assemblers	$28,570	4.30%

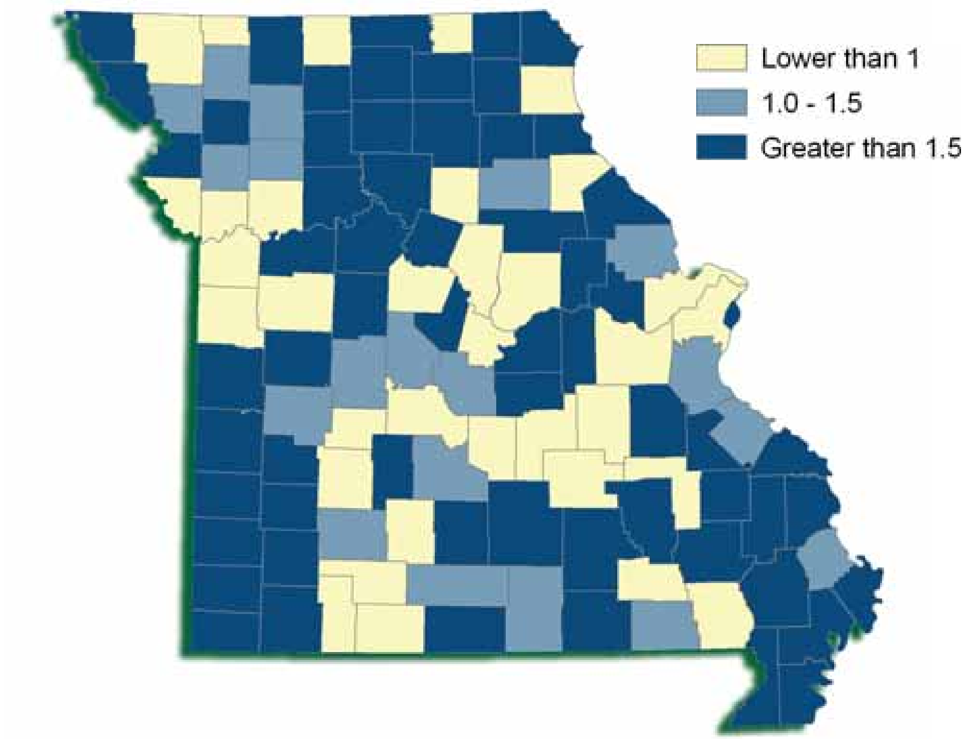
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



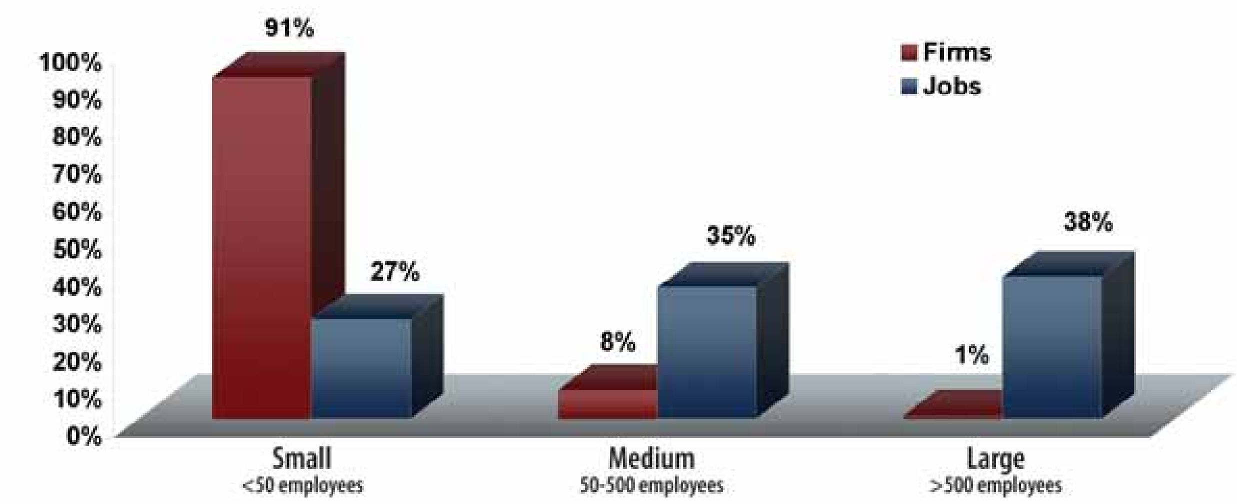
Location Quotient by County (2006)



Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
325320	Pesticide and other ag. chemical mfg.	10.50	1.85%
316214	Women's nonathletic footwear manufacturing	9.28	33.40%
312120	Breweries	6.74	15.56%
311111	Dog and cat food manufacturing	6.36	0.06%
315291	Infants' cut and sew apparel manufacturing	6.05	243.39%
316213	Men's nonathletic footwear manufacturing	4.74	61.32%
314911	Textile bag mills	4.49	223.66%
311514	Dry, condensed, and evaporated dairy products	4.12	76.72%
311823	Dry pasta manufacturing	3.73	2.44%
325314	Fertilizer, mixing only, manufacturing	3.65	12.93%
311513	Cheese manufacturing	3.62	-8.79%
315991	Hat, cap, and millinery manufacturing	3.54	-28.21%
311222	Soybean processing	3.08	-19.96%
315992	Glove and mitten manufacturing	3.05	-3.38%
311520	Ice cream and frozen dessert manufacturing	2.86	63.35%
322224	Uncoated paper and multiwall bag mfg.	2.73	-0.51%
333294	Food product machinery manufacturing	2.65	29.18%
315299	All other cut and sew apparel manufacturing	2.58	86.59%
424520	Livestock merchant wholesalers	2.51	-1.89%
316110	Leather and hide tanning and finishing	2.46	33.02%

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

115111	Cotton Ginning
115112	Soil Preparation, Planting, and Cultivating
115113	Crop Harvesting, Primarily by Machine
115114	Postharvest Crop Activities (except Cotton Ginning)
115115	Farm Labor Contractors and Crew Leaders
115116	Farm Management Services
115210	Support Activities for Animal Production
115310	Support Activities for Forestry
212391	Potash, Soda, and Borate Mineral Mining
212392	Phosphate Rock Mining
212393	Other Chemical and Fertilizer Mineral Mining
311111	Dog and Cat Food Manufacturing
311119	Other Animal Food Manufacturing
311211	Flour Milling
311212	Rice Milling
311213	Malt Manufacturing
311221	Wet Corn Milling
311222	Soybean Processing
311223	Other Oilseed Processing
311225	Fats and Oils Refining and Blending
311230	Breakfast Cereal Manufacturing
311311	Sugarcane Mills
311312	Cane Sugar Refining
311313	Beet Sugar Manufacturing
311320	Chocolate and Confectionery Manufacturing from Cacao Beans
311330	Confectionery Manufacturing from Purchased Chocolate
311340	Nonchocolate Confectionery Manufacturing
311411	Frozen Fruit, Juice, and Vegetable Manufacturing
311412	Frozen Specialty Food Manufacturing
311421	Fruit and Vegetable Canning

311422	Specialty Canning
311423	Dried and Dehydrated Food Manufacturing
311511	Fluid Milk Manufacturing
311512	Creamery Butter Manufacturing
311513	Cheese Manufacturing
311514	Dry, Condensed, and Evaporated Dairy Product Manufacturing
311520	Ice Cream and Frozen Dessert Manufacturing
311611	Animal (except Poultry) Slaughtering
311612	Meat Processed from Carcasses
311613	Rendering and Meat By-product Processing
311615	Poultry Processing
311711	Seafood Canning
311712	Fresh and Frozen Seafood Processing
311812	Commercial Bakeries
311813	Frozen Cakes, Pies, and Other Pastries Manufacturing
311821	Cookie and Cracker Manufacturing
311822	Flour Mixes and Dough Manufacturing from Purchased Flour
311823	Dry Pasta Manufacturing
311830	Tortilla Manufacturing
311911	Roasted Nuts and Peanut Butter Manufacturing
311919	Other Snack Food Manufacturing
311920	Coffee and Tea Manufacturing
311930	Flavoring Syrup and Concentrate Manufacturing
311941	Mayonnaise, Dressing, and Other Prepared Sauce Manufacturing
311942	Spice and Extract Manufacturing
311991	Perishable Prepared Food Manufacturing
311999	All Other Miscellaneous Food Manufacturing
312111	Soft Drink Manufacturing
312112	Bottled Water Manufacturing
312113	Ice Manufacturing

NAICS industries included in targeted cluster (continued)

312120	Breweries
312130	Wineries
312140	Distilleries
312210	Tobacco Stemming and Redrying
312221	Cigarette Manufacturing
312229	Other Tobacco Product Manufacturing
313111	Yarn Spinning Mills
313112	Yarn Texturing, Throwing, and Twisting Mills
313113	Thread Mills
313210	Broadwoven Fabric Mills
313221	Narrow Fabric Mills
313222	Schiffli Machine Embroidery
313230	Nonwoven Fabric Mills
313241	Weft Knit Fabric Mills
313249	Other Knit Fabric and Lace Mills
313311	Broadwoven Fabric Finishing Mills
313312	Textile and Fabric Finishing (except Broadwoven Fabric) Mills
314911	Textile Bag Mills
314999	All Other Miscellaneous Textile Product Mills
315111	Sheer Hosiery Mills
315119	Other Hosiery and Sock Mills
315191	Outerwear Knitting Mills
315192	Underwear and Nightwear Knitting Mills
315211	Men's and Boys' Cut and Sew Apparel Contractors
315212	Women's, Girls', and Infants' Cut and Sew Apparel Contractors
315221	Men's & Boys' Cut and Sew Underwear and Nightwear Manufacturing
315222	Men's and Boys' Cut and Sew Suit, Coat, and Overcoat Manufacturing
315223	Men's & Boys' Cut and Sew Shirt (except Work Shirt) Manufacturing
315224	Men's and Boys' Cut and Sew Trouser, Slack and Jean Manufacturing
315225	Men's and Boys' Cut and Sew Work Clothing Manufacturing
315228	Men's and Boys' Cut and Sew Other Outerwear Manufacturing
315231	Women's and Girls' Cut and Sew Lingerie, Loungewear, and Nightwear Manufacturing
315232	Women's and Girls' Cut and Sew Blouse and Shirt Manufacturing
315233	Women's and Girls' Cut and Sew Dress Manufacturing
315234	Women's and Girls' Cut and Sew Suit, Coat, Tailored Jacket, and Skirt Manufacturing
315239	Women's and Girls' Cut and Sew Other Outerwear Manufacturing
315291	Infants' Cut and Sew Apparel Manufacturing
315292	Fur and Leather Apparel Manufacturing
315299	All Other Cut and Sew Apparel Manufacturing
315991	Hat, Cap, and Millinery Manufacturing
315992	Glove and Mitten Manufacturing
315993	Men's and Boys' Neckwear Manufacturing
315999	Other Apparel Accessories and Other Apparel Manufacturing
316110	Leather and Hide Tanning and Finishing
316211	Rubber and Plastics Footwear Manufacturing
316212	House Slipper Manufacturing
316213	Men's Footwear (except Athletic) Manufacturing
316214	Women's Footwear (except Athletic) Manufacturing
316219	Other Footwear Manufacturing
316991	Luggage Manufacturing
316992	Women's Handbag and Purse Manufacturing
316993	Personal Leather Good (except Women's Handbag and Purse) Manufacturing
316999	All Other Leather Good Manufacturing
321920	Wood Container and Pallet Manufacturing
322130	Paperboard Mills
322211	Corrugated and Solid Fiber Box Manufacturing
322212	Folding Paperboard Box Manufacturing
322213	Setup Paperboard Box Manufacturing
322214	Fiber Can, Tube, Drum, and Similar Products Manufacturing
322215	Non-Folding Sanitary Food Container Manufacturing
322221	Coated and Laminated Packaging Paper and Plastics Film Manufacturing
322222	Coated and Laminated Paper Manufacturing
322223	Plastics, Foil, and Coated Paper Bag Manufacturing
322224	Uncoated Paper and Multiwall Bag Manufacturing
322225	Laminated Aluminum Foil Manufacturing for Flexible Packaging Uses
322226	Surface-Coated Paperboard Manufacturing
322291	Sanitary Paper Product Manufacturing
325311	Nitrogenous Fertilizer Manufacturing
325312	Phosphatic Fertilizer Manufacturing
325314	Fertilizer (Mixing Only) Manufacturing
325320	Pesticide and Other Agricultural Chemical Manufacturing
326111	Plastics Bag Manufacturing
326112	Plastics Packaging Film and Sheet (including Laminated) Manufacturing
326160	Plastics Bottle Manufacturing
327213	Glass Container Manufacturing
332115	Crown and Closure Manufacturing
332431	Metal Can Manufacturing
333111	Farm Machinery and Equipment Manufacturing
333294	Food Product Machinery Manufacturing
423820	Farm and Garden Machinery and Equipment Merchant Wholesalers
424510	Grain and Field Bean Merchant Wholesalers
424520	Livestock Merchant Wholesalers
424590	Other Farm Product Raw Material Merchant Wholesalers
424910	Farm Supplies Merchant Wholesalers
493120	Refrigerated Warehousing and Storage
493130	Farm Product Warehousing and Storage
523130	Commodity Contracts Dealing
523140	Commodity Contracts Brokerage
541940	Veterinary Services

The Missouri Wine Industry

Missouri's wine industry is having great success, with state winemakers winning top honors for their products and sales of Missouri-made wines on the rise. Our state has more than 1,200 bearing acres of grapes producing millions of dollars in wine sales and supporting jobs for Missourians.

Missouri's sun-drenched rolling hills and long growing season are perfect for realizing the full potential of grapes like the Norton/Cynthiana, which is the official state grape.

More than 50 wineries operate in Missouri.

Locations

A large concentration of the state's commercial winemaking takes place alongside or in close proximity to the Missouri River, and roads that run along the river, like State Highways 94 or 100, are known as "Wine Trails."

Sales on the Rise

More and more people from within the state, across the country, and around the world are enjoying our locally made wines. Sales of Missouri wine recently topped 700,000 gallons.

These trends in sales have translated into increased market share. Wine sold from winery retail locations and in-state wholesalers show a jump in market share for Missouri wines to over 7 percent of the state's total wine market.

Missouri wineries are winning over new consumers by offering a wide variety of great-tasting products. The industry has now set a goal to sell one million gallons of Missouri wine by 2010.

Economic Value

Inside every bottle of Missouri wine are the agriculture, manufacturing, packaging, transportation, advertising, retail, and tourism industries.

All of these are necessary for commercial winemaking. A growing Missouri wine industry means more job opportunities and income for Missourians and more revenue for our state and local governments.

An important entity within the state's wine industry is the Missouri Wine and Grape Board. The board works to strengthen interest in and patronage of our state's grape and wine businesses.

Funded by a twelve cents-per-gallon tax on wine sales, the Wine and Grape Board coordinates the marketing and public relations activities for Missouri-made wines, hosts wine competitions and trade and educational seminars, and funds research efforts.

Wine Research

Continued research is critical to compete in the highly competitive national and international wine marketplaces. Our state's wine industry must grow superior quality grapes to make superior quality wines.

The Midwest Viticulture Center in Mountain Grove Missouri is one research asset helping our local grape growers and wine producers. The Center, operated by Missouri State University, provides invaluable research, information, education, and services to grape and wine businesses.

A second research center to assist Missouri's grape and wine industry has now been started at the University of Missouri-Columbia.

Expansion to the new MU location offers additional opportunities for collaboration with top level researchers, a direct link to Cooperative Extension services, and additional funding options.

With these investments, the future looks bright for grape and wine research in Missouri.

AUTOMOTIVE

Automotive–Definition

The Automotive cluster is comprised of industries involved in the manufacturing of motor vehicles, such as buses, cars, and trailer trucks. This also includes the manufacturing of new and after-market parts for use within the design of the motor vehicle.

Missouri's Strengths

Vehicle Manufacturing

Light truck, utility vehicle, and truck trailer manufacturing are key global exporters and large employers in Missouri. The three major American automakers have had locations in the state for many years. Firms in this industry have contributed to the development of a highly skilled workforce in the state. Companies included in this industry are Chrysler Corporation, Ford Motor Company, and General Motors Corporation.

Vehicle Parts Manufacturing

Other large employers and exporters within the automotive segment in Missouri involve parts manufacturing. These industries manufacture and design parts for new cars as well as after-market. Growth industries include the manufacture of storage batteries, carburetors, pistons, valves, steering, suspensions, current-carrying wiring devices, seating, and vehicle bodies. Eagle-Picher and Lear Operations are some of the companies involved in vehicle parts manufacturing.

Key Locations

The largest employing areas in Automotive are located mainly in the St. Louis and Kansas City metro areas, and Greene County. The highest employment growth areas include the northwest, the central region, the Ozarks region, and the southeast. Regional export areas are spread throughout Missouri.

Factoid:

- Missouri is home to the Dodge Ram, the Chrysler Caravan, the Ford Escape, the GMC Savana, and the Chevrolet Express.
- 90% of all Automobile Dealers are involved in selling new cars; 10% sell used.
- More than 16% of automotive service technicians are self employed.
- The first locally manufactured gas engines were built in 1897 by the St. Louis Gasoline Engine Company.

What's Next for Automotive?

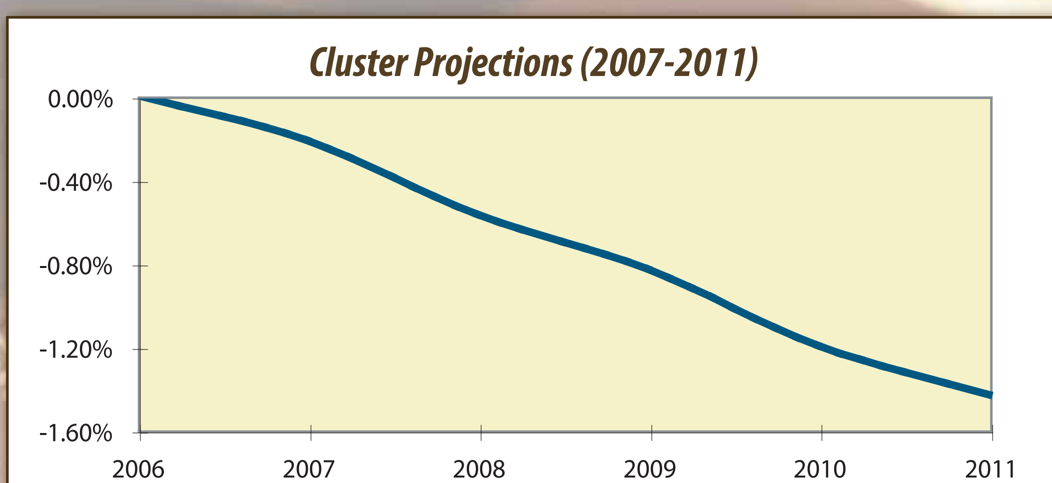
Automotive manufacturing is an important part of Missouri's economy. The automotive industry accounts for nearly 1.6% of total employment in the state. Ford, Daimler Chrysler and General Motors all have assembly plants in Missouri. A large number of vehicle parts manufacturers and wholesalers are also located in Missouri.

Higher gas prices have changed consumer buying patterns from large trucks and SUV's to smaller, more fuel-efficient vehicles. This change is impacting the industry in different ways. Both Ford and Chrysler have recently announced assembly plant closures or employee cuts due to this shifting consumer demand. On a positive note, Chrysler has announced plans to convert one of its assembly plants into a flexible manufacturing facility which is capable of producing different models on the same assembly line. Flexible manufacturing systems represent the future of automotive manufacturing.

Automobile parts manufacturers in Missouri are aware that this changing market also means changes for them. Some are expanding their markets to reach automobile manufacturers throughout the U.S. Diversified Plastics Corporation in Nixa, for example, has recently contracted with Honda to manufacture foam seating.

Overall, employment has been consistent for Missouri's automotive industrial group, despite a measured decrease in the number of total establishments between 2001 and 2005. Manufacturing output is expected to continue to grow to replace existing vehicles and meet the demand for new vehicles as the driving population grows. Market pressures for fuel efficiency and lower emissions could provide opportunities for new investment in the state as parts manufacturers adapt to new technology.

Missouri is a top ten auto-producing state. Possessing an automotive industrial knowledge base that reaches across the state, a robust and evolving infrastructure, and competitive energy costs, Missouri remains poised to continue as a key partner in the auto industry of the future.



Cluster Statistics

- Number of Businesses (2006) 258
- Number of Jobs (2006) 36,223
- Percent of Total Missouri Jobs (2006) 1.58%
- Average Annual Wages (2005) $54,167
- Location Quotient (2006) 1.65
- Percent Change from 2001 Location Quotient 3.91%
- Net Percent Change in Jobs (2001-2006) .... -12.2%

- Total Change in Jobs (2001-2006) .... -5,051

Employment Change from 2001 attributed to:

- National Factors 1,059
- Industry Factors .... -7,066
- Missouri's Competitiveness 956

Top Five Industries

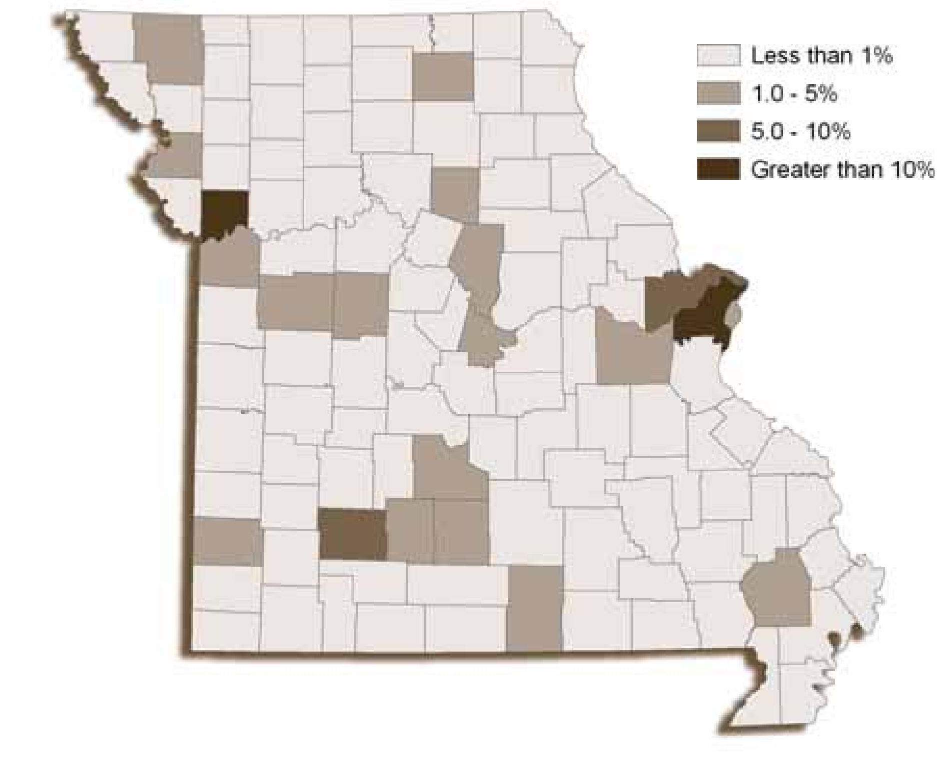
- Light truck and utility vehicle manufacturing
- Motor vehicle parts manufacturing
- Motor vehicle seating and interior trim mfg.
- Storage battery manufacturing
- Truck trailer manufacturing

68% of Cluster Jobs

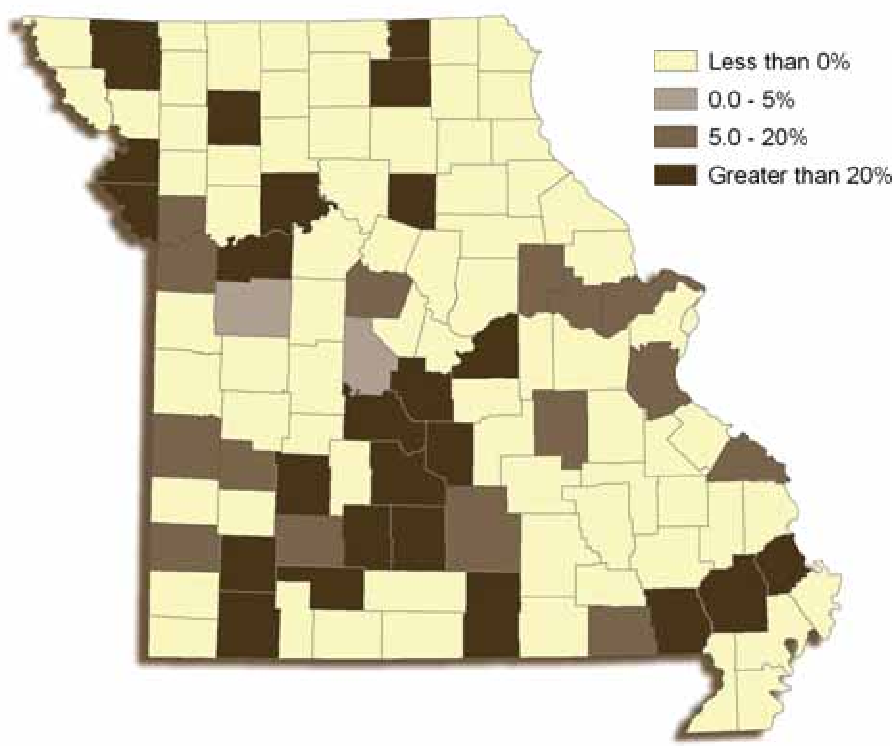
Targeted Occupations with Projected Growth and Current Wage

42% of Cluster Occupations	*Current Wage*	*Projected Growth 2004–2014*
Maintenance and Repair Workers	$32,410	10.30%
Electricians	$50,500	9.20%
Welders, Cutters, Solderers, and Brazers	$29.840	4.90%
First-Line Supervisors/Managers	$47,950	4.40%
Team Assemblers	$28,570	4.30%

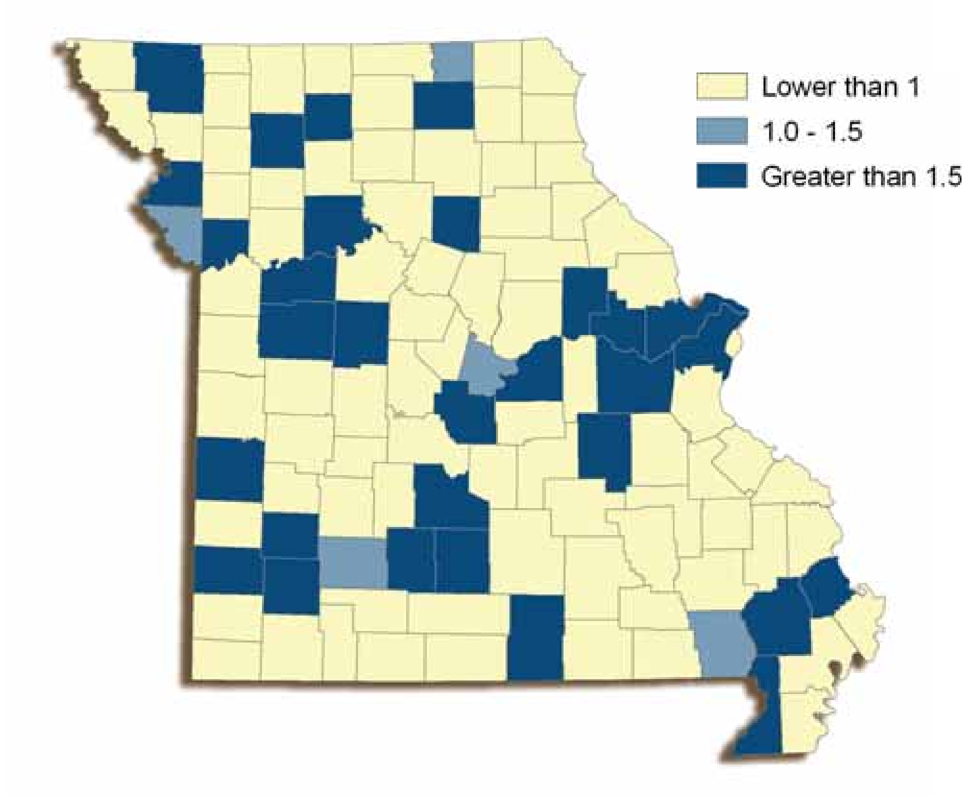
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



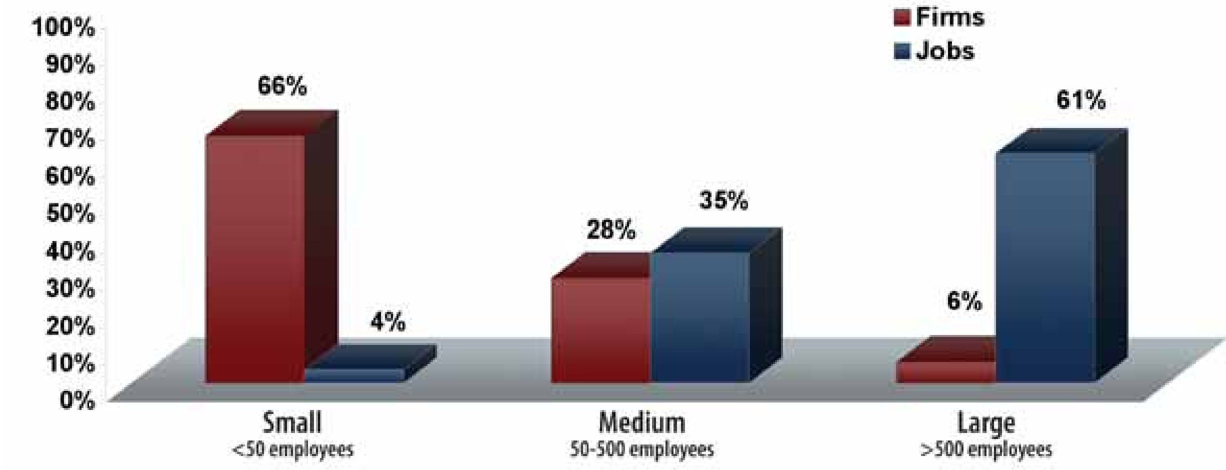
Location Quotient by County (2006)



Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
336112	Light truck and utility vehicle manufacturing	9.52	-25.81%
335911	Storage battery manufacturing	6.41	44.42%
336212	Truck trailer manufacturing	2.46	-8.79%
336321	Vehicular lighting equipment manufacturing	2.32	-4.93%
336360	Motor vehicle seating and interior trim mfg.	2.08	-12.78%
336311	Carburetor, piston, ring, and valve mfg.	2.01	30.47%
336340	Motor vehicle brake system manufacturing	1.95	-22.30%
336330	Motor vehicle steering and suspension parts	1.46	47.70%
336399	All other motor vehicle parts manufacturing	1.30	8.63%
335931	Current-carrying wiring device manufacturing	1.13	27.60%
336211	Motor vehicle body manufacturing	1.07	21.06%

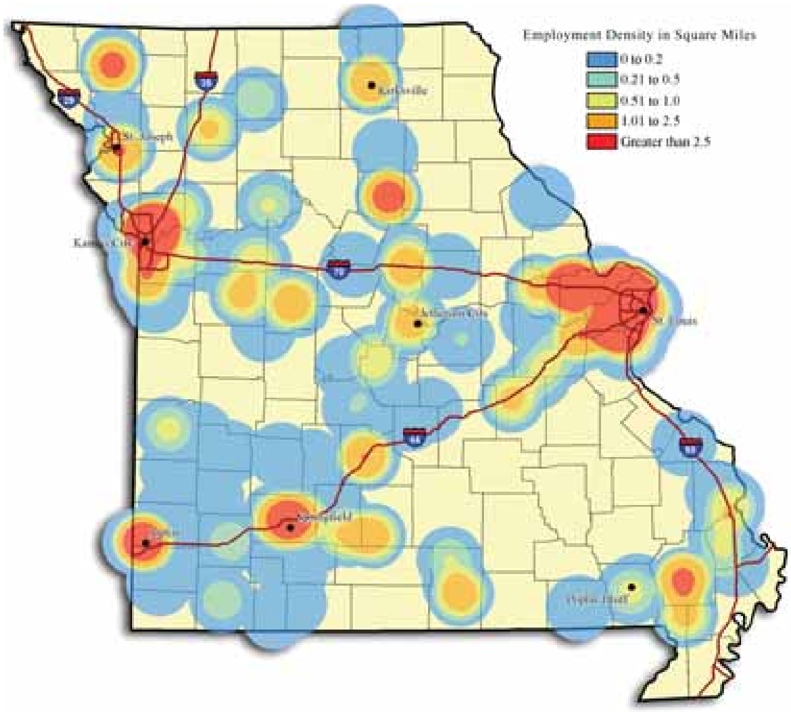
Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

335110	Electric Lamp Bulb and Part Manufacturing
335911	Storage Battery Manufacturing
335931	Current-Carrying Wiring Device Manufacturing
336111	Automobile Manufacturing
336112	Light Truck and Utility Vehicle Manufacturing
336120	Heavy Duty Truck Manufacturing
336211	Motor Vehicle Body Manufacturing
336212	Truck Trailer Manufacturing
336311	Carburetor, Piston, Piston Ring, and Valve Manufacturing
336312	Gasoline Engine and Engine Parts Manufacturing
336321	Vehicular Lighting Equipment Manufacturing
336322	Other Motor Vehicle Electrical and Electronic Equipment Manufacturing
336330	Motor Vehicle Steering and Suspension Components (except Spring) Manufacturing
336340	Motor Vehicle Brake System Manufacturing
336350	Motor Vehicle Transmission and Power Train Parts Manufacturing
336360	Motor Vehicle Seating and Interior Trim Manufacturing
336370	Motor Vehicle Metal Stamping
336391	Motor Vehicle Air-Conditioning Manufacturing
336399	All Other Motor Vehicle Parts Manufacturing

Missouri Auto Industry: The Supply Chain



Distribution trend maps illustrate the clustering orientation of employees or firms which can help identify industry corridors.

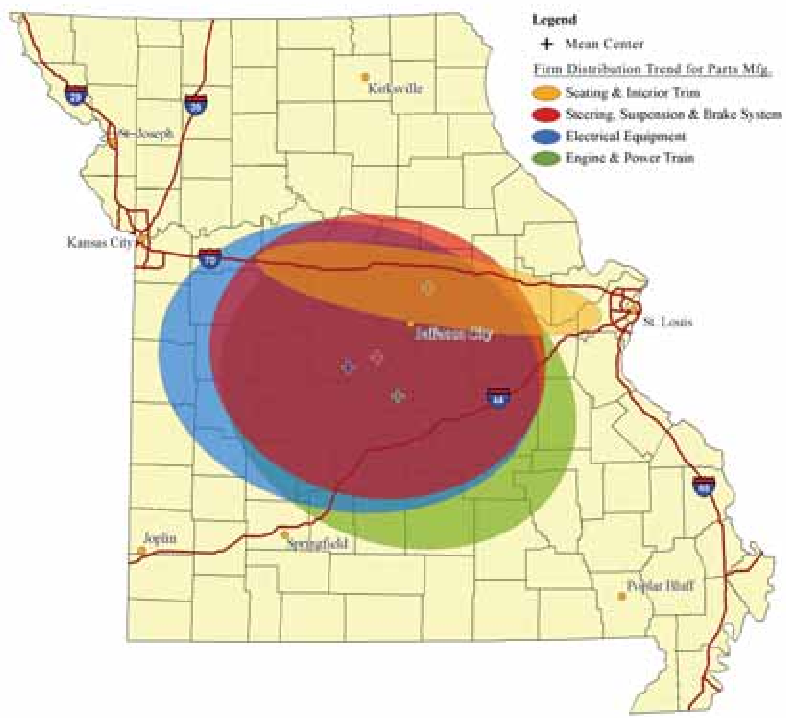
With major assembly operations in the metro areas of Kansas City and St. Louis, industrial expertise along the automotive value chain extends throughout Missouri. The employment density of automotive assembly plants, along with automotive parts manufacturers, is illustrated by the map on the left.

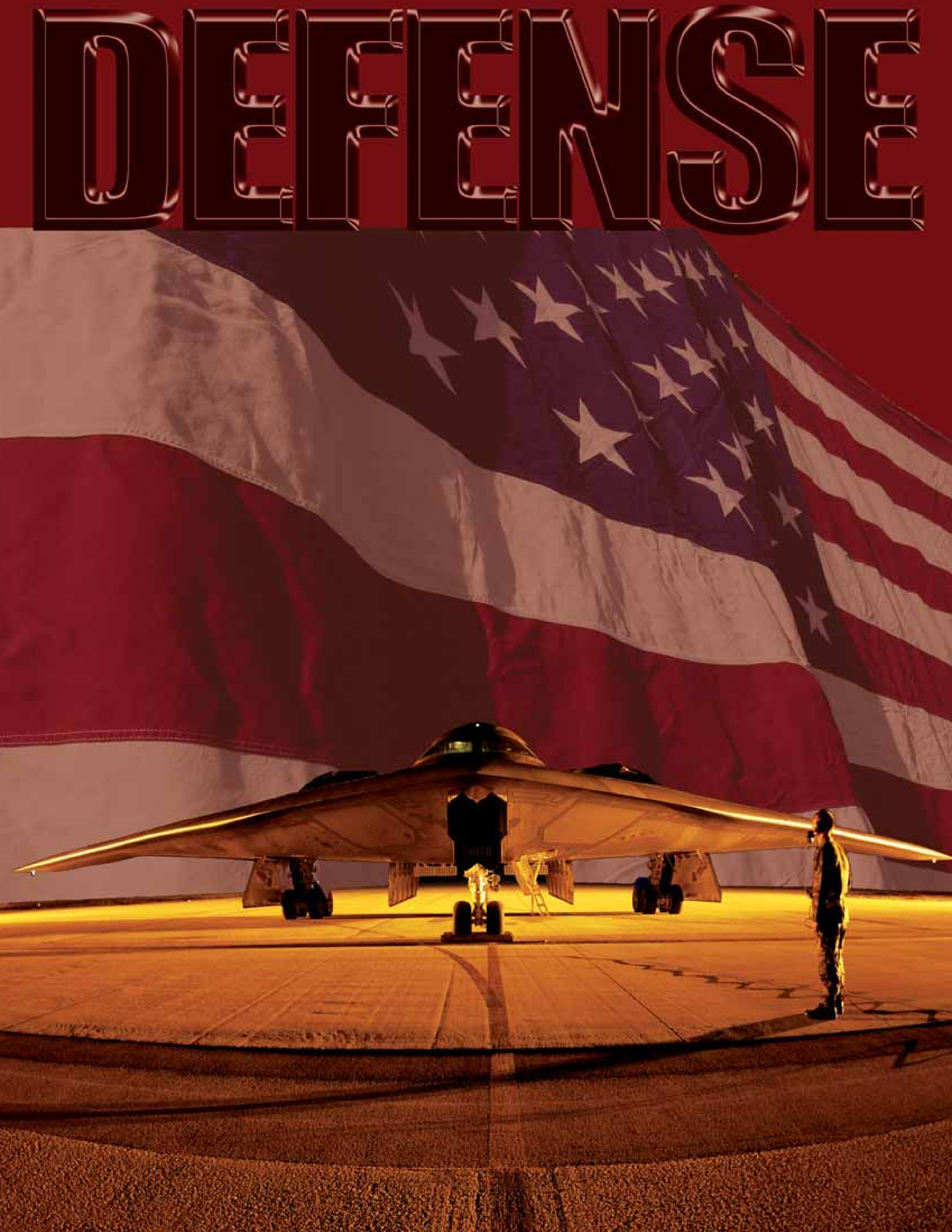
The automotive parts and component firms' distribution is shown to the right.

"Steering, Suspension & Brake System", "Electrical Equipment", and "Engine & Power Train" trend southward toward Springfield but with heavy influence from Kansas City and St. Louis.

The directional trend for "Seating & Interior Trim" establishments, however, tightens along the Interstate 70 corridor and slightly favors the St. Louis metropolitan area.

Firm Distribution Trend of Missouri Automotive Parts Manufacturers




DEFENSE

Defense • Homeland Security–Definition

The Defense and Homeland Security cluster is comprised of industries that supply and support local and national security. Included are defense related research activities and the manufacturing of communications equipment, ammunition, military vehicles, and aircraft/aerospace components.

Missouri's Strengths

Aircraft / Military Vehicle Manufacturing

A major employing industry and exporter within this cluster manufactures vehicles used in military service and aerospace. Boeing is included in this group.

Ammunition

Another major employer and exporter within this cluster are industries involved in the manufacturing of ammunition. Missouri manufactures small arms ammunition, explosives, and longer range ammunition. Companies such as Alliant Lake City Small Ammunitions Company are included in this group.

Advanced Defense Manufacturing

Technology and research associated with advanced manufacturing are an integral part in developing vehicles, weapon systems, and search/detection devices often used in defense. Honeywell, La Barge, and United Technologies are a few companies involved in this activity.

Military Bases

Our two main military bases, Fort Leonard Wood and Whiteman Air Force Base, have attracted a variety of private defense and aerospace companies to Missouri. The companies benefit from their proximity to these bases. National base relocations are not expected to affect the number of military personnel in the region over the long term. Therefore, businesses that supply these bases with equipment and services should remain stable.

Key Locations

The largest employing areas in defense related industries are in St. Louis and Jackson counties. The highest growth areas are along I-70 and Howell, Christian, and Barry counties. Areas of high cluster concentration include Jackson, Linn, Chariton, and Wayne counties.

Factoid:

- Whiteman Air Force Base is home to the B-2 Long Range Stealth Bomber.
- McDonnell Douglas built the Apollo, Mercury, and Gemini space capsules in St. Louis.
- Fort Leonard Wood was originally established in 1940 as a basic training site. Over 3 million service men and women have been trained at the site since its opening.
- Built in 1826, Jefferson Barracks is the oldest military post west of the Mississippi.

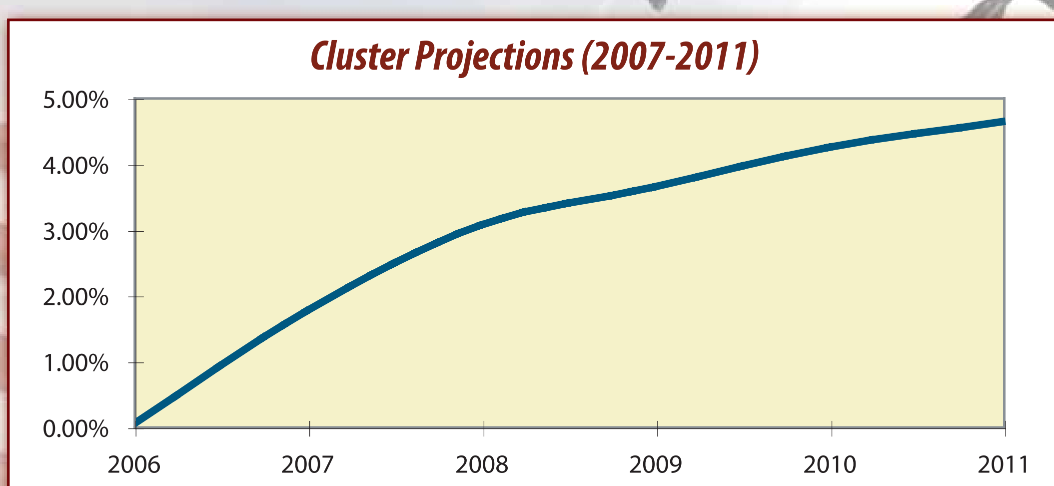
What's Next for Defense • Homeland Security?

Missouri employment in defense and homeland security has shown a healthy increase since 2000, though it remains well short of 1990 levels. Two industries in particular – Small Arms Ammunition Manufacturing and Research & Development in the Physical Engineering and Life Sciences – have shown strong increases since 2000.

However, other manufacturing industries in the cluster have continued to see slow declines in employment. Consolidation of civilian employment at government military facilities has primarily resulted in net employment losses to the state; approximately two-thirds since 1990.

It is expected that 2000-2006 trends in cluster employment will continue into the future, with most growth on the service-providing side, and goods-producing employment stable or declining. Research and development now has a strong employment base in Missouri, and should continue to grow. Although with Boeing announcing the likely termination of the C-17 transport aircraft program in 2008, aircraft manufacturing is likely to show the largest decrease among the cluster's component industries. The one goods-producing industry that has shown strong employment growth, ammunition manufacturing, has traditionally depended on contract awards, and the strong increases in the first part of the decade reflect new contracts. Because of capacity limitations, it is doubtful that employment in the industry will expand very much beyond 2006 levels.

Some consolidation may continue at Department of Defense offices in the St. Louis and Kansas City areas, but it is likely that the large-scale cutbacks of the 1990s are a thing of the past. The state's two major military facilities, Fort Leonard Wood and Whiteman Air Force Base, host high-priority military operations. They should show stable-to-increasing employment levels for the remainder of the decade and beyond. In addition, Jefferson Barracks in St. Louis, one of the oldest of its kind, is expected to add personnel and construct a new barracks by 2008.



Cluster Statistics

- Number of Businesses (2006) 348
- Number of Jobs (2006) 16,922
- Percent of Total Missouri Jobs (2006) 0.74%
- Average Annual Wages (2005) $77,935
- Location Quotient (2006) 0.78
- Percent Change from 2001 Location Quotient 38.25%
- Net Percent Change in Jobs (2001-2006) 42.2%
- Total Change in Jobs (2001-2006) 5,024

Employment Change from 2001 attributed to:

- National Factors 305
- Industry Factors 180
- Missouri's Competitiveness 4,538

Top Five Industries

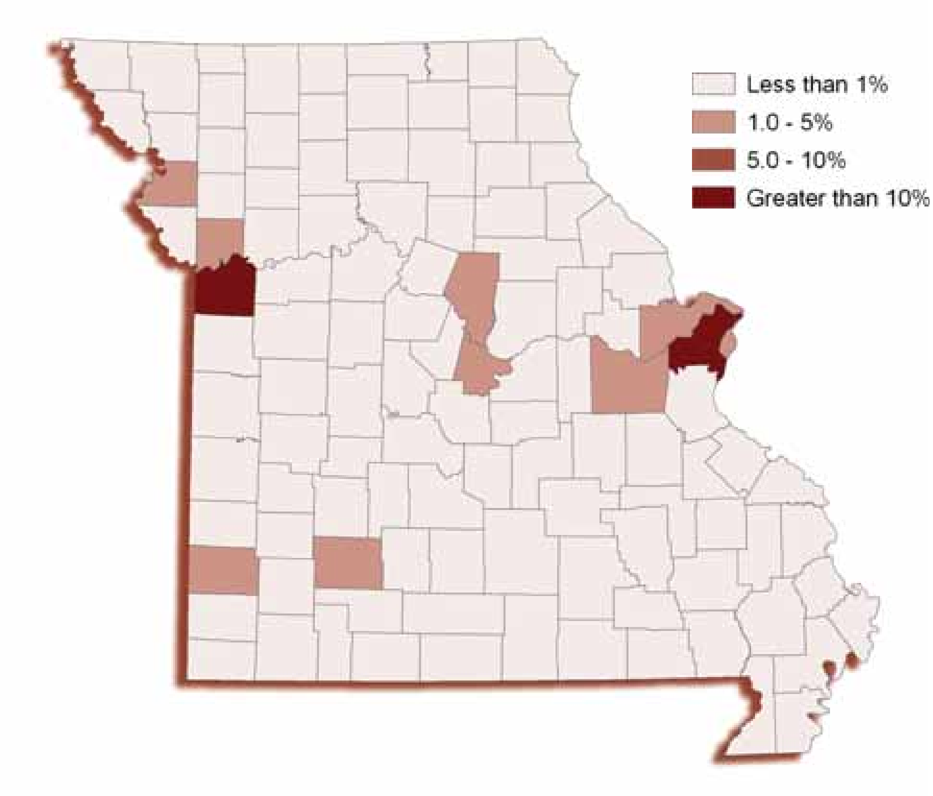
- Physical, engineering and biological research
- Ammunition, except small arms, manufacturing
- Small arms ammunition manufacturing
- Fabricated structural metal manufacturing
- Surgical appliance and supplies manufacturing

96.6% of Cluster Jobs

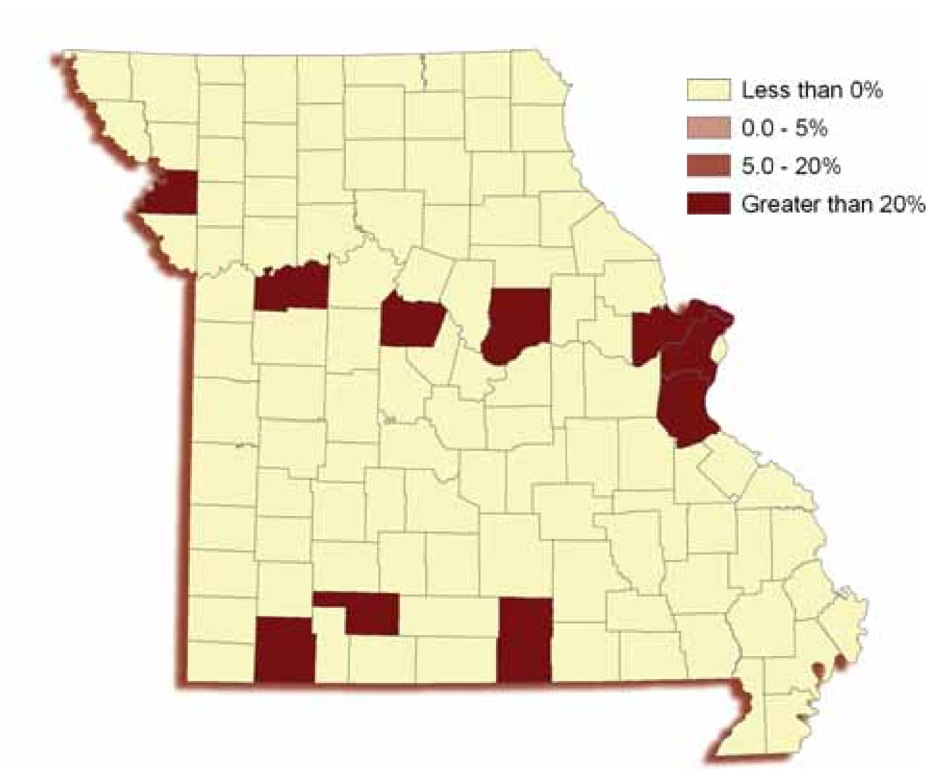
Targeted Occupations with Projected Growth and Current Wage

12% of Cluster Occupations	Current Wage	Projected Growth 2004–2014
Computer Software Engineers	$74,330	34.40%
Medical Scientists	$59,910	30.00%
Business Operations Specialists	$52,310	15.80%
Industrial Engineers	$69,160	10.40%
Structural Metal Fabricators and Fitters	$31,400	5.30%

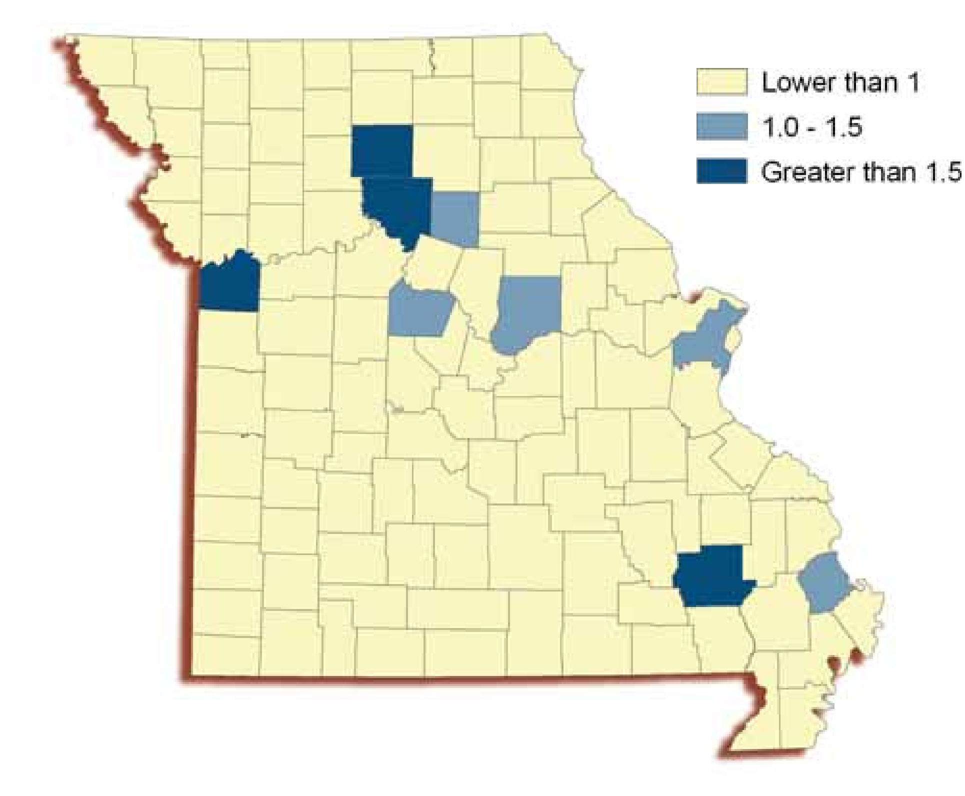
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



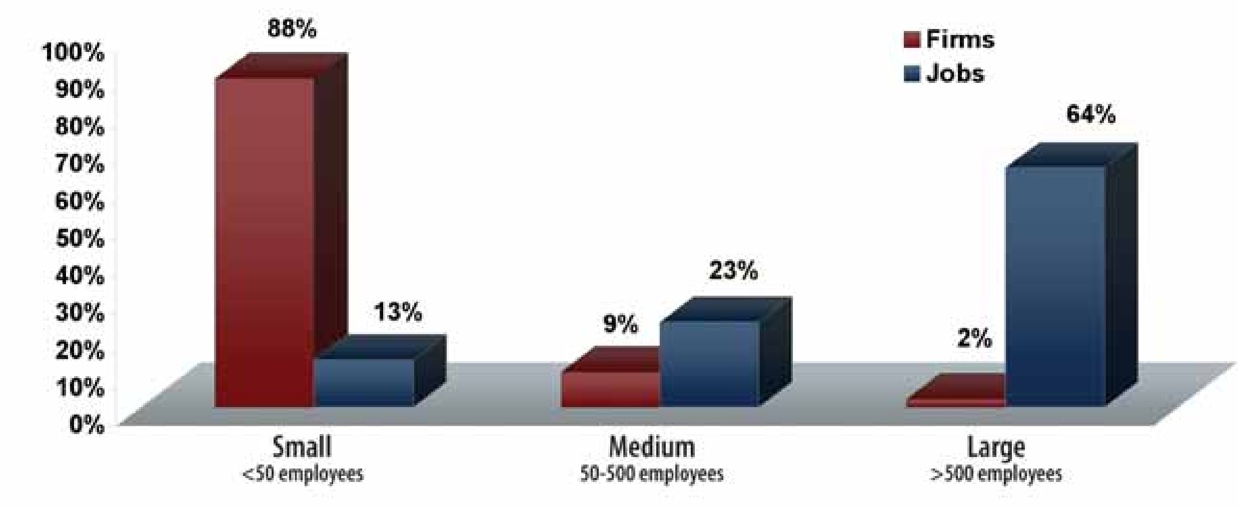
Location Quotient by County (2006)



Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
332992	Small arms ammunition manufacturing	11.31	58.91%
332993	Ammunition, except small arms, manufacturing	7.35	3.80%
325920	Explosives manufacturing	2.43	-3.20%
332312	Fabricated structural metal manufacturing	0.89	0.97%
541710	Physical, engineering and biological research	0.85	59.68%

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

325920	Explosives Manufacturing
332312	Fabricated Structural Metal Manufacturing
332992	Small Arms Ammunition Manufacturing
332993	Ammunition (except Small Arms) Manufacturing
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument
336414	Guided Missile and Space Vehicle Manufacturing
336415	Guided Missile and Space Vehicle Propulsion Unit and Propulsion Unit Parts Manufacturing
336419	Other Guided Missile and Space Vehicle Parts and Auxiliary Equipment Manufacturing
336992	Military Armored Vehicle, Tank, and Tank Component Manufacturing
339113	Surgical and Medical Instrument Manufacturing
541710	Research and Development in the Physical, Engineering, and Life Sciences

One of a Kind:

The University of Missouri Technology Park at Fort Leonard Wood

The University of Missouri Technology Park at Fort Leonard Wood is located in Pulaski County, Missouri on the Army base of Fort Leonard Wood. The park is the first technology park in the country located on an active military base. It is part of a collaborative funding effort between University of Missouri Systems and Missouri Technology Corporation *(an affiliate of the Missouri Department of Economic Development)*.

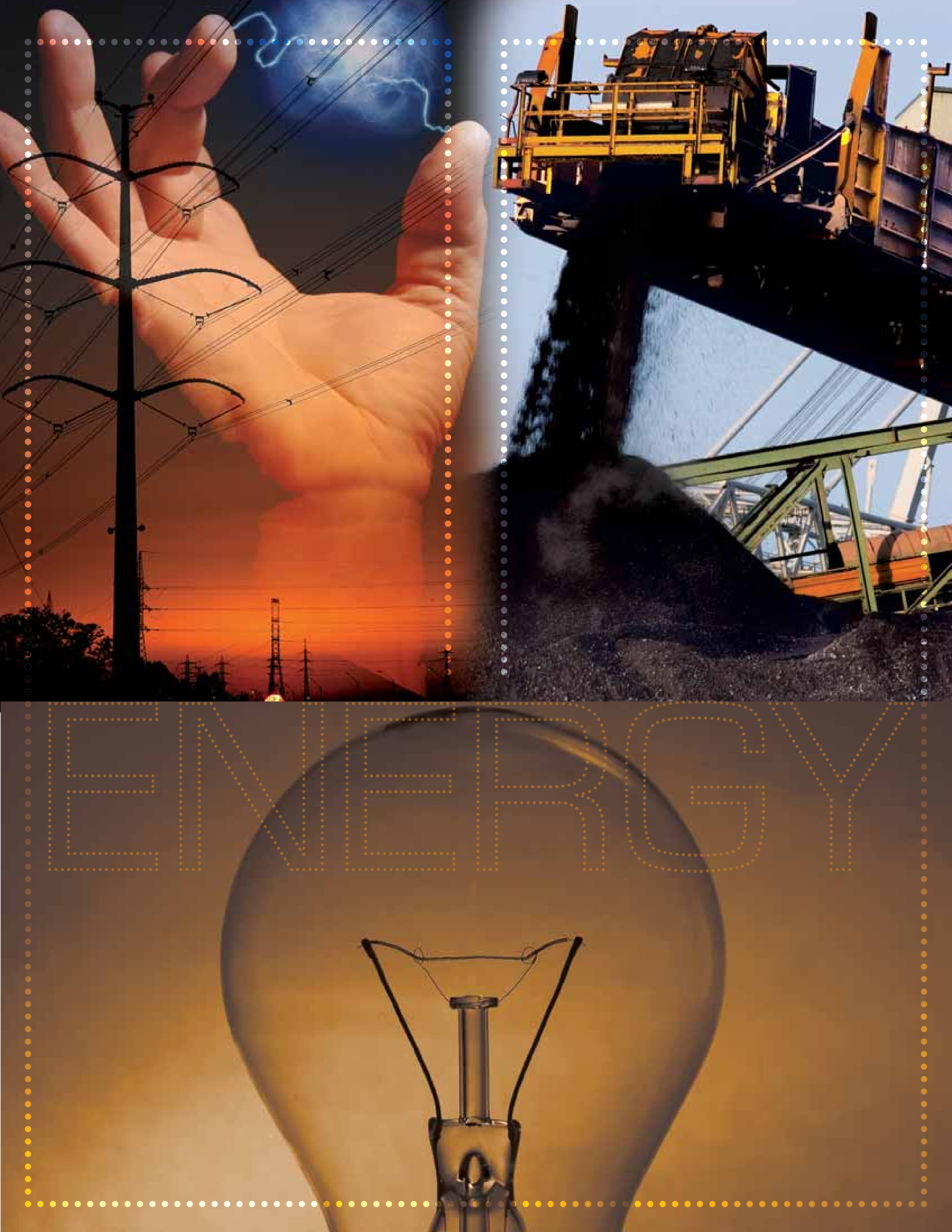
Development of the park calls for the construction of 17 buildings on 62 acres of land. To date two of the buildings have been built. Tenants of the existing buildings include: 21st Century Systems, Concurrent Technologies Corporation, Titan Corporation,

The University of Missouri Rolla, Lincoln University, Anteon, the Fort Leonard Wood Regional Commerce and Growth Association, and the United States Army.

The belief held by the technology park's founders is that the environment of the park is unique because it allows for interaction and collaboration between the federal military, academic institutions (namely the University of Missouri at Rolla and the University of Missouri system), and the private sector. All three entities are heavily involved in research and development of new technologies and interaction between the three enabled by the physical space of the technology park can lead to productive collaborations for all parties.

One example of collaboration which has already come out of the technology park is the foundation and future funding of a geospatial intelligence laboratory at the Columbia campus of the University of Missouri system. The result of the collaboration has potential to be a multi-million dollar project funded by the federal government on the University of Missouri campus.

In order to promote collaborative efforts such as the one mentioned above, the Leonard Wood Institute was founded in 2004. Its mission is to "enable and manage collaborative efforts to assist in developing ...highly integrated research and development" to support operations of the Department of Defense. The goal of the Leonard Wood Institute is to enable the evolution of research projects in Department of Defense programs and research centers. The Leonard Wood Institute also hopes to help organizations with which it works to leverage funding through federal revenue, licensing income from intellectual property, ownership in business spin-offs, and an increased number of implementation contracts resulting from funded research.


ENERGY

Energy–Definition

The Energy cluster is defined by industries involved in the operation of power facilities, and the manufacturing of machinery and parts used in the production of energy.

Missouri's Strengths

Energy Generation

Energy Generation, particularly fossil fuels and hydroelectric generation, represent key export industries in Missouri. These companies have displayed tremendous growth over the past five years and lead the cluster in employment.

Technology

Other large employers and exporters within the energy segment in Missouri represent the technological core of the cluster. These industries manufacture and design transformers, communication and energy wire, environmental control systems, and switchgear apparatus. ABB Power Company, Regal Beloit, and Fasco Industries are some of the companies involved in energy technology.

Alternative Fuels

Alternative fuel resources from corn (ethanol) and soybean oil (biodiesel) are growing industries in Missouri. The demand for biofuels is driven by the Renewable Fuels Standard which requires that Missouri gasoline contain at least 10 percent ethanol by 2008. This industry is also expected to be a major exporter of biofuels by 2008.

Mining and Exploration

Mining and Exploration represent an important function within the energy cluster. Coal mining and crude oil exploration are industries found in Missouri. Companies such as Peabody are involved in mining coal. However, Missouri currently has limited traditional energy resources which places limits on the expansion of these companies.

Key Locations

The Energy cluster employment distribution in Missouri occurs mainly in counties of higher population density. The largest Energy employing areas are located mainly in St. Louis, Kansas City, Callaway County, and Howell County. The highest growth areas include the Kansas City region, Jasper County, the southeast, counties north of St. Louis, and the center line of Missouri running from north to south. Areas of high concentration include central Missouri (north to south), Holt County, the southwest, the southeast, and the St. Louis region.

Factoid:

- The transportation and residential sectors lead state energy consumption.
- Nearly 591,000 tons of coal is excavated in Missouri annually.
- Missouri averages 92,000 barrels of crude oil annually, a value of $4.2 million dollars of sales in 2005.

What's Next in Energy?

Missouri's energy industry benefits from a diverse set of resources which has helped maintain recent industry employment growth and spurred advancements in energy research, especially ethanol.

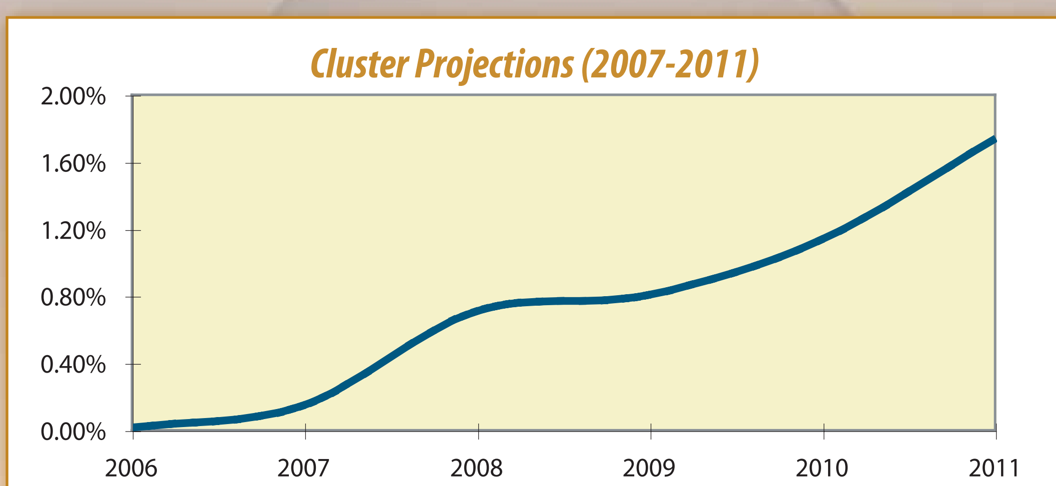
In 2006, the Missouri Renewable Fuel Standard passed into law. This will require all gasoline in the state to contain at least 10 percent ethanol by 2008. This requirement makes Missouri one of the few states in the nation to implement a 10 percent ethanol standard.

Missouri is well suited for this task, with four ethanol plants operating at a capacity of 155 million gallons per year. Additional plants will increase production capacity to nearly 800 million gallons per year in 2008. Although ethanol has taken center stage in the energy industry, it's not Missouri's only alternative energy source. Biodiesel from soybeans, hydropower from Missouri's dams, solar energy, and wind energy are making their marks on Missouri's energy landscape as well.

Nevertheless, Missouri relies heavily on traditional means of energy production, with coal accounting for 85% of net electricity generation. Oil and nuclear power are also key energy generating resources in the state and are expected to be for many years.

In contrast, developing technologies are changing the type of resources traditionally used as fuel as well as producing energy saving devices used in automobiles, homes, and businesses. Methods are being advanced in producing fuel efficiently from biomass products, such as ethanol and biodiesel. Battery assisted engines and hydrogen fuel cells are other examples of developing technologies in automobiles. Homes, businesses, and public use spaces are increasingly benefited from "green" construction materials and other products which provide energy efficiency and low emissions. All of these technological trends represent opportunities for Missouri in manufacturing, research, construction, and biofuel production.

Specialized energy firms can also benefit from the increasing global demand for electricity. Electrical equipment manufacturers, for example, may see new market opportunities as developing economies around the world strive to increase their power generation capacities.



Cluster Statistics

- Number of Businesses (2006) 696
- Number of Jobs (2006) 20,275
- Percent of Total Missouri Jobs (2006) 0.88%
- Average Annual Wages (2005) $58,053
- Location Quotient (2006) 1.29
- Percent Change from 2001 Location Quotient .... -1.91%
- Net Percent Change in Jobs (2001-2006) .... -17.6%
- Total Change in Jobs (2001-2006) .... -4,320

Employment Change from 2001 attributed to:

- National Factors 631
- Industry Factors .... -4,315
- Missouri's Competitiveness .... -637

Top Five Industries

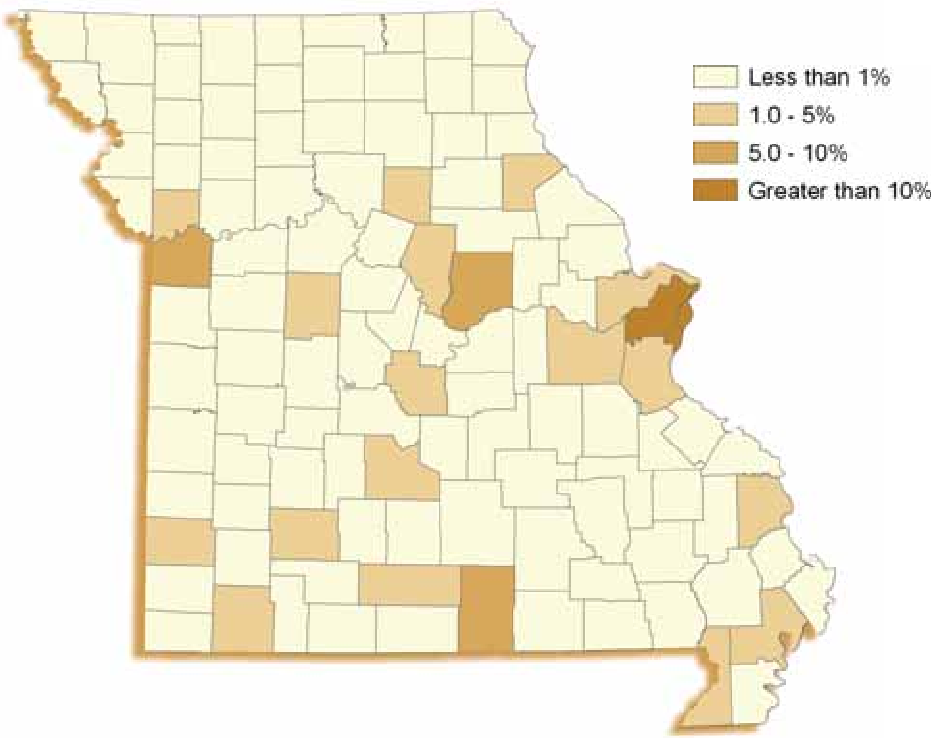
- Fossil fuel electric power generation
- Motor and generator manufacturing
- Power and communication system construction
- Electric power and specialty transformer mfg.
- Professional and technical services

74.2% of Cluster Jobs

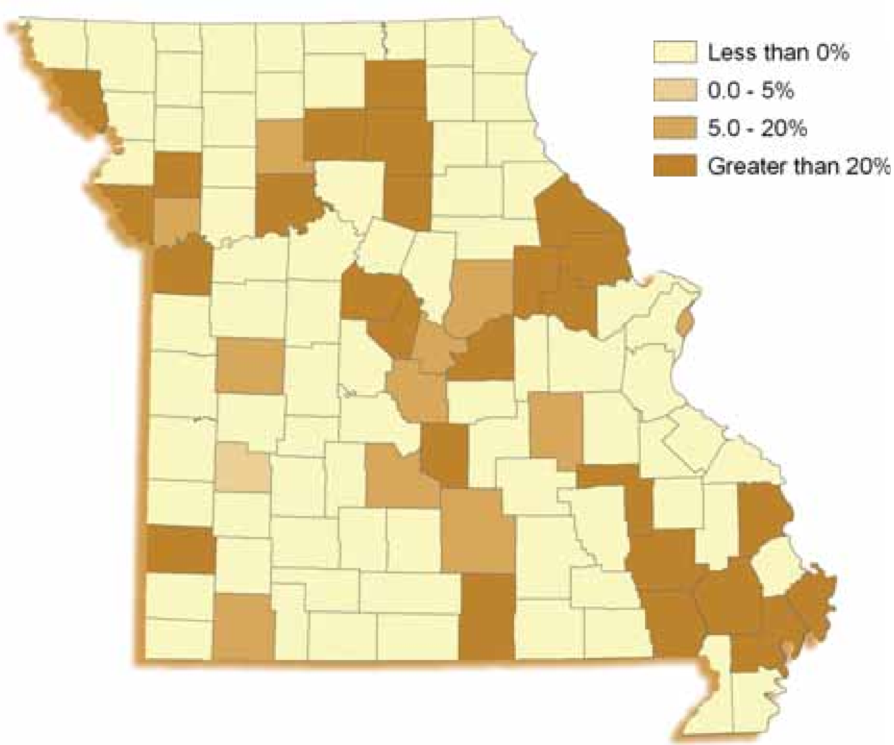
Targeted Occupations with Projected Growth and Current Wage

15% of Cluster Occupations	Current Wage	Projected Growth 2004–2014
Customer Service Representatives	$29,480	16.00%
Operating Engineers and Other Construction Equipment Operators	$40,960	13.30%
Maintenance and Repair Workers	$32,410	10.30%
Management Analysts	$67,400	7.20%
Truck Drivers	$36,510	6.80%

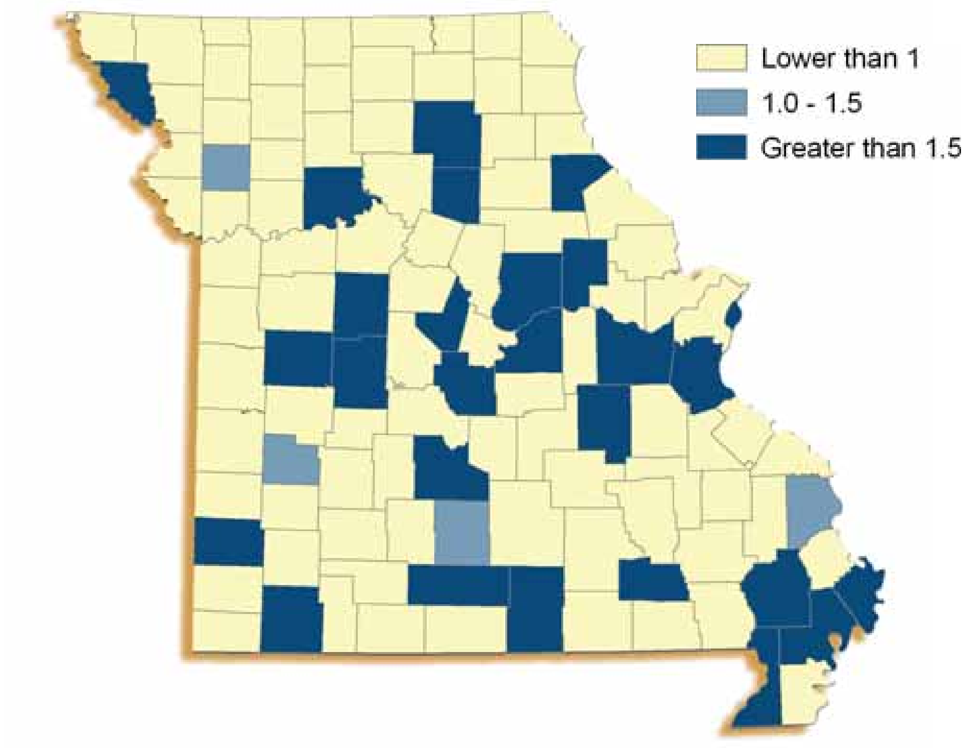
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



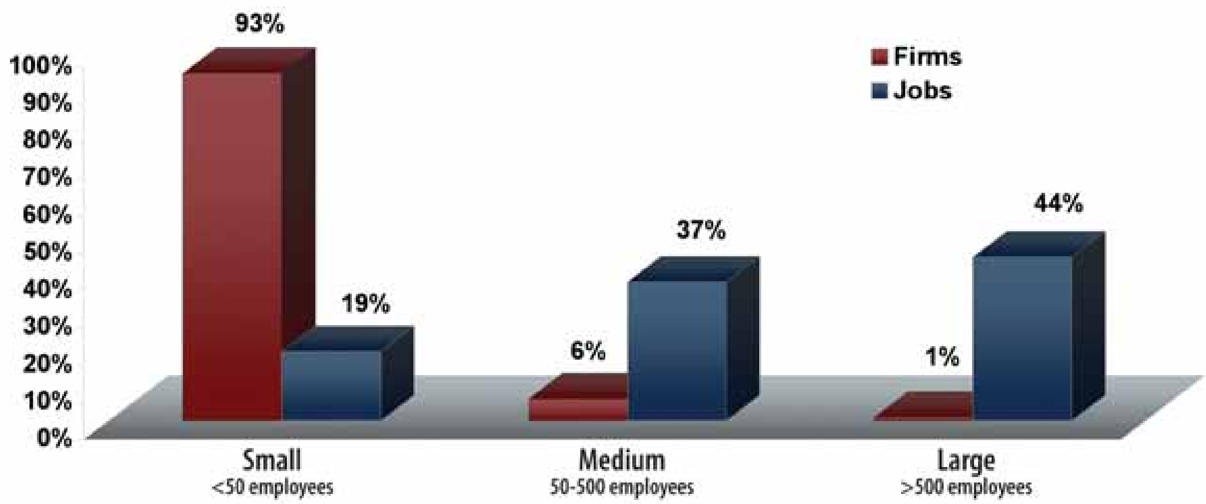
Location Quotient by County (2006)



Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
335312	Motor and generator manufacturing	4.53	-12.85%
335311	Electric power and specialty transformer mfg.	2.53	16.52%
335929	Other communication and energy wire mfg.	2.46	246.00%
334512	Automatic environmental control manufacturing	1.93	39.07%
221112	Fossil fuel electric power generation	1.70	142.07%
331319	Other aluminum rolling and drawing	1.64	78.77%
335313	Switchgear and switchboard apparatus mfg.	1.50	4.77%
237130	Power and communication system construction	1.24	-29.43%
325193	Ethyl alcohol manufacturing	1.14	19.53%
221111	Hydroelectric power generation	1.05	70.10%

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

221111	Hydroelectric Power Generation
221112	Fossil Fuel Electric Power Generation
221113	Nuclear Electric Power Generation
221119	Other Electric Power Generation
237130	Power and Communication Line and Related Structures Construction
325193	Ethyl Alcohol Manufacturing
331319	Other Aluminum Rolling and Drawing
331422	Copper Wire (except Mechanical) Drawing
332410	Power Boiler and Heat Exchanger Manufacturing
334512	Automatic Environmental Control Manufacturing
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals
335311	Power, Distribution, and Specialty Transformer Manufacturing
335312	Motor and Generator Manufacturing
335313	Switchgear and Switchboard Apparatus Manufacturing
335921	Fiber Optic Cable Manufacturing
335929	Other Communication and Energy Wire Manufacturing
541618	Other Management Consulting Services
541990	All Other Professional, Scientific, and Technical Services
562213	Solid Waste Combustors and Incinerators

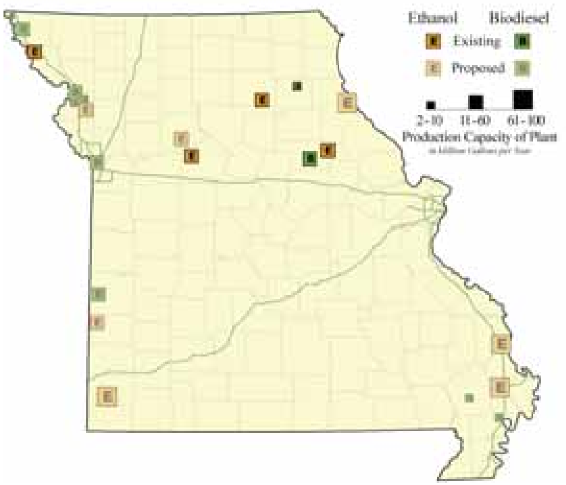
Economic Impact of the Biofuel Industry in Missouri

Biofuels are renewable fuels made from organic matter. In recent years increased demand for these fuels has created a large push to build biofuel plants around the United States. Ethanol, derived from corn, is the most common biofuel in the U.S. and is typically blended with gasoline. Biodiesel, a smaller biofuel industry, is beginning to gain ground in the U.S. market as a substitute for petroleum diesel. Biodiesel in the U.S. is usually derived from soybean oil and can be used in diesel engines without modification.

Overview

MERIC conducted an analysis for years 2004 to 2013 to quantify existing and estimated future economic impacts of the biofuel industry in Missouri. Direct benefits to Missouri include investment and jobs associated with 21 biofuel plants as well as increased farm incomes.

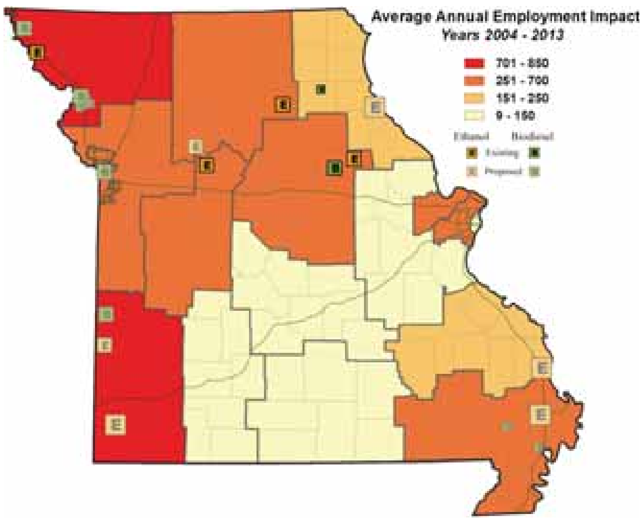
Missouri Biofuel Plants

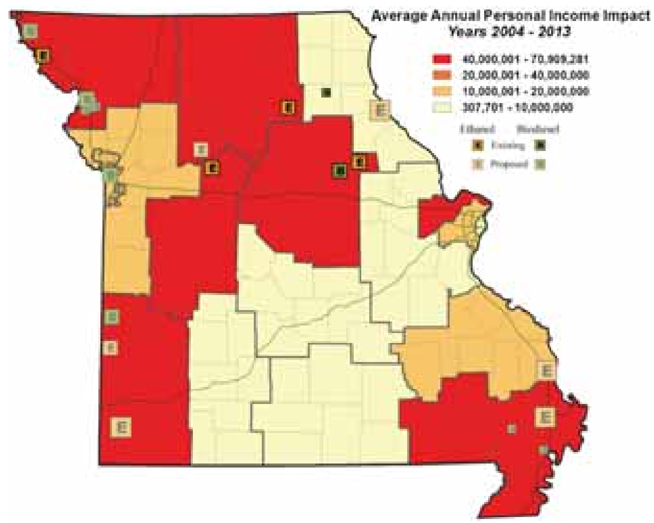


The biofuel industry directly impacts the manufacturing and agricultural sectors, in particular farmers who invest in biofuel plants or who supply feedstock. Missouri biofuel incentives are targeted at crop producers, typically located within the state, which help keep profits in Missouri. Because of this, much of the gain to Missouri's economy can be seen in investor dividends and farm incomes. This money, along with income generated by plant employment, flows through the state creating additional jobs and income in other industries.

Average Annual Impact to Economic Regions in Missouri

The maps represent the average construction and operation phase impacts of employment and personal income over a 10 year period (2004-2013). Existing and proposed plants are also shown.





The Impact of Targeting Incentives towards Missouri Investors

Missouri biofuel incentives require that the majority of plant investors be agricultural producers, which are typically farmers located in Missouri. Targeting incentives helps promote gains to Missouri income that may not occur if plant profits accrue to out-of-state investors.

The boxes illustrate gains to Missouri from biofuel plants owned by in-state investors. In-state investors own 100% of most biofuel plants in Missouri. The ethanol plant impact is based on a typical facility producing 50 mgy and employing 38 workers.

The typical biodiesel plant produces 30 mgy and employs 21 workers. For comparison, the same plants were modeled assuming 100% out-of-state ownership. Although impacts will vary based on individual facilities, the overall benefit to Missouri from targeting incentives is clearly evident.

What Difference Can One Ethanol Plant Make?

Additional impact of profits that accrue to in-state rather than out-of-state investors:

	10 year Avg
ADDITIONAL AVG. ANNUAL EMPLOYMENT	300 jobs
ADDITIONAL PERSONAL INCOME	$293 million

New personal income to Missourians for every gallon purchased:

	Personal Income *(10 year Avg)*
100% IN-STATE INVESTORS	$0.82
100% OUT-OF-STATE INVESTORS	$0.17
DIFFERENCE	*$0.65*

What Difference Can One Biodiesel Plant Make?

Additional impact of profits that accrue to in-state rather than out-of-state investors:

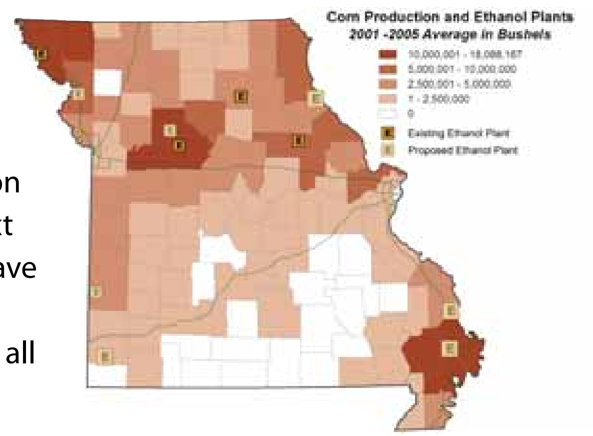
	10 year Avg
ADDITIONAL AVG. ANNUAL EMPLOYMENT	267 jobs
ADDITIONAL PERSONAL INCOME	$278 million

New personal income to Missourians for every gallon purchased:

	Personal Income *(10 year Avg)*
100% IN-STATE INVESTORS	$1.16
100% OUT-OF-STATE INVESTORS	$0.13
DIFFERENCE	*$1.03*

Biofuel Supply

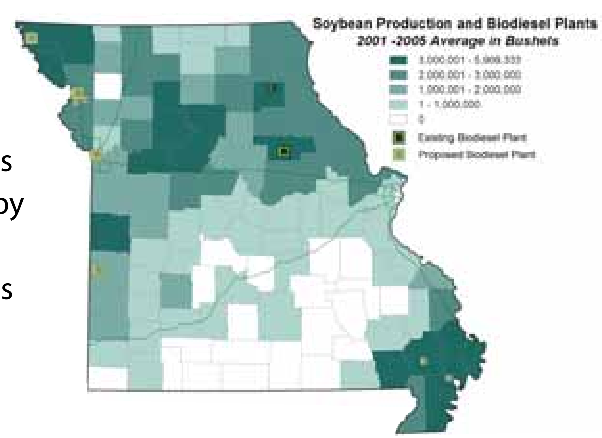
U.S. ethanol production was nearly 4 billion gallons in 2005, up from 1.8 billion in 2001. This represents an annual increase of 20 percent. Currently 101 ethanol plants in the U.S. have a combined capacity of 4.8 billion gallons a year. Construction of 39 additional ethanol plants along with expansions will bring that capacity to 7.4 billion gallons. Missouri has 4 existing ethanol plants with a capacity of 163 million gallons, with 7 additional plants planned in the next couple of years. By 2008, Missouri's 11 plants will have a total ethanol production capacity of nearly 800 million gallons per year, representing 11 percent of all U.S. ethanol production.



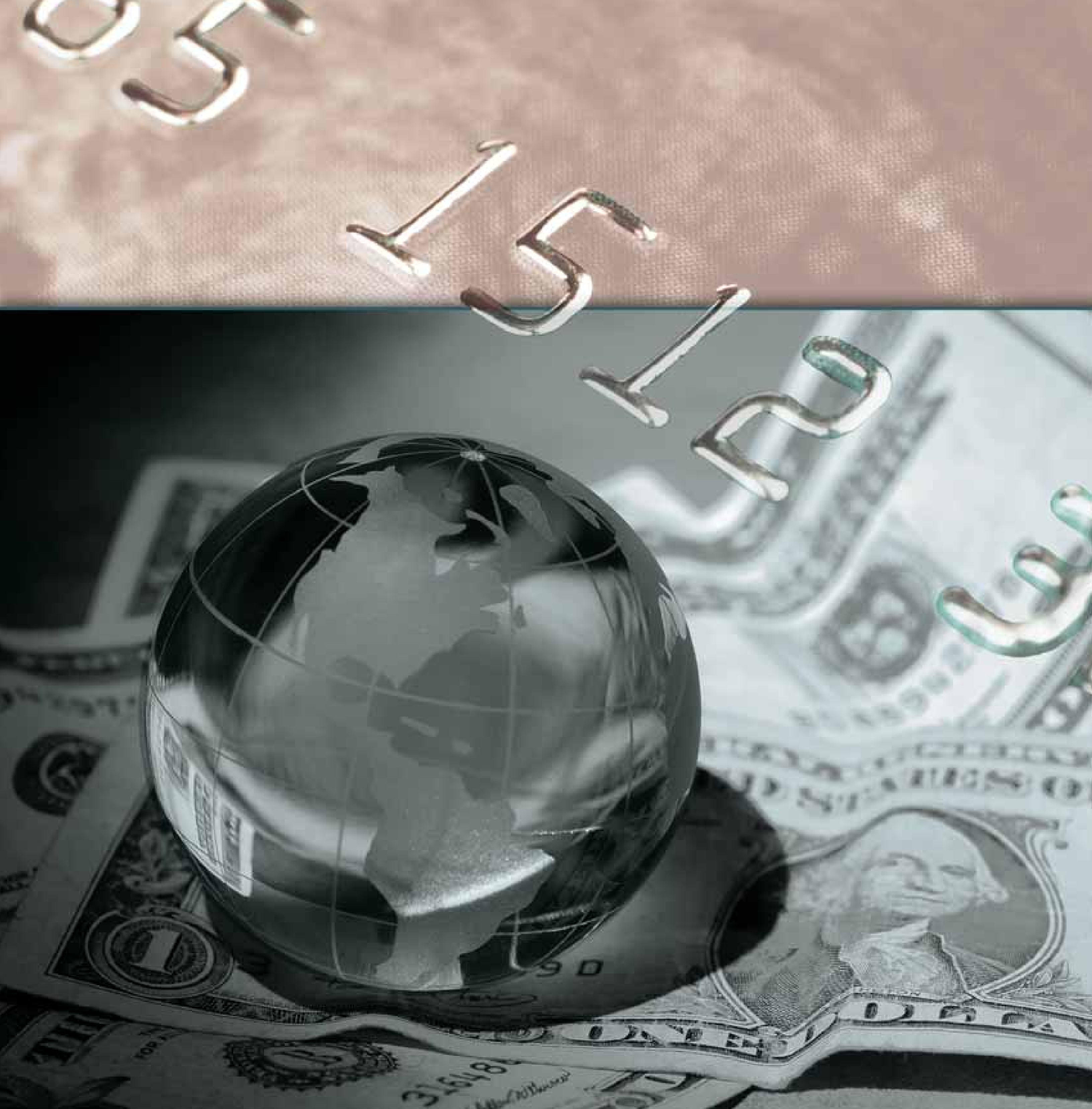
National biodiesel production has increased dramatically in the past 5 years, rising from 5 million gallons in 2001 to 245 million gallons by 2006. Capacity is expected to reach over 1.8 billion gallons a year in 2007. Missouri currently has two biodiesel plants with a capacity of 32 million gallons. Eight additional plants are currently in the planning stages. If all plants are built by 2008, Missouri will have 10 plants with the capacity to produce over 200 million gallons of biodiesel a year.

Biofuel Demand

Current demand for biofuels has been driven largely by high oil prices and the initiatives of the federal government, along with several states, to expand the use of biofuels within their borders. The Renewable Fuels Standard (RFS), part of the national 2005 Energy Policy Act, requires the blending of renewable fuels with gasoline or diesel to reach 7.5 billion gallons by 2012. All gasoline in Missouri, by 2008, will contain a minimum of 10 percent ethanol. Four other states have similar measures.



The RFS, continued high oil prices, and improved production technologies could continue to make Missouri's biofuels a competitive alternative to standard gasoline and diesel fuels. However, uncertainties in future commodity prices along with emerging biofuel technologies which use alternatives to corn and soybeans could create changes in the market that are hard to forecast at this time.



FINANCE

Finance–Definition

The Finance cluster focuses on industries primarily engaged in the transfer, holding, and investment of money. These include Banking, Investment and Financing, Insurance, and Tax Preparations.

Missouri's Strengths

Banking

Banking related companies are one of the largest employing sectors in the finance cluster. Commercial banks (U.S. Bank, Bank of America, Commerce) and central banks (Federal Reserve Banks of St. Louis and Kansas City) are examples.

Insurance

Direct property and casualty insurers are large employers as well as nationally competitive. Other competitive sectors in insurance are direct title insurers, insurance related activities, claims adjusting and other direct insurers. State Farm, United Healthcare, and American Family are in the insurance sector.

Tax Preparation

Another major employing industry sector within finance is accounting services, specifically offices of certified public accountants. Nationally competitive tax preparation services, such as H&R Block and Pricewaterhouse Coopers are headquartered in Missouri.

Investment and Financing

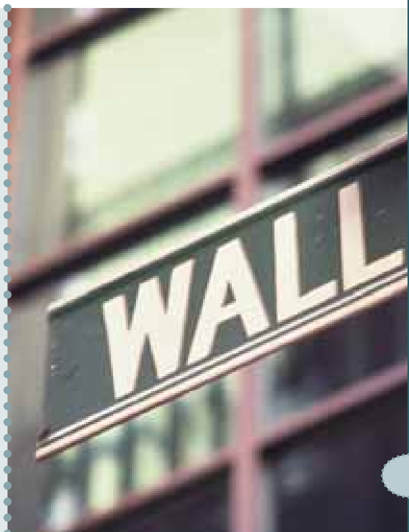
This sector of the finance cluster is considered high growth, competitive, and a large employer. Investment and financing is made up of a variety of industries that are highlighted as a sub-cluster later in this section.

Key Locations

The largest Finance employing areas are in St. Louis, Kansas City, St. Charles County, and Greene County. The highest growth areas are in the south, central, west central, and north central regions, along with counties northwest of St. Louis. Areas with high cluster concentrations include Chariton, Clinton, and Jackson counties.

Factoid:

- Charles Lindbergh named his plane "Spirit of St. Louis" in gratitude of the businessmen who financially backed his solo Atlantic flight in 1927.
- Missouri is the only state with two Federal Reserve Banks.
- The Federal Reserve Bank of Kansas City processes more than 1 million checks a day.
- The Truman Coin Collection, exhibited in the Kansas City Money Museum, has over 450 U.S. mint coins, dating from the George Washington presidency to the Jimmy Carter administration.

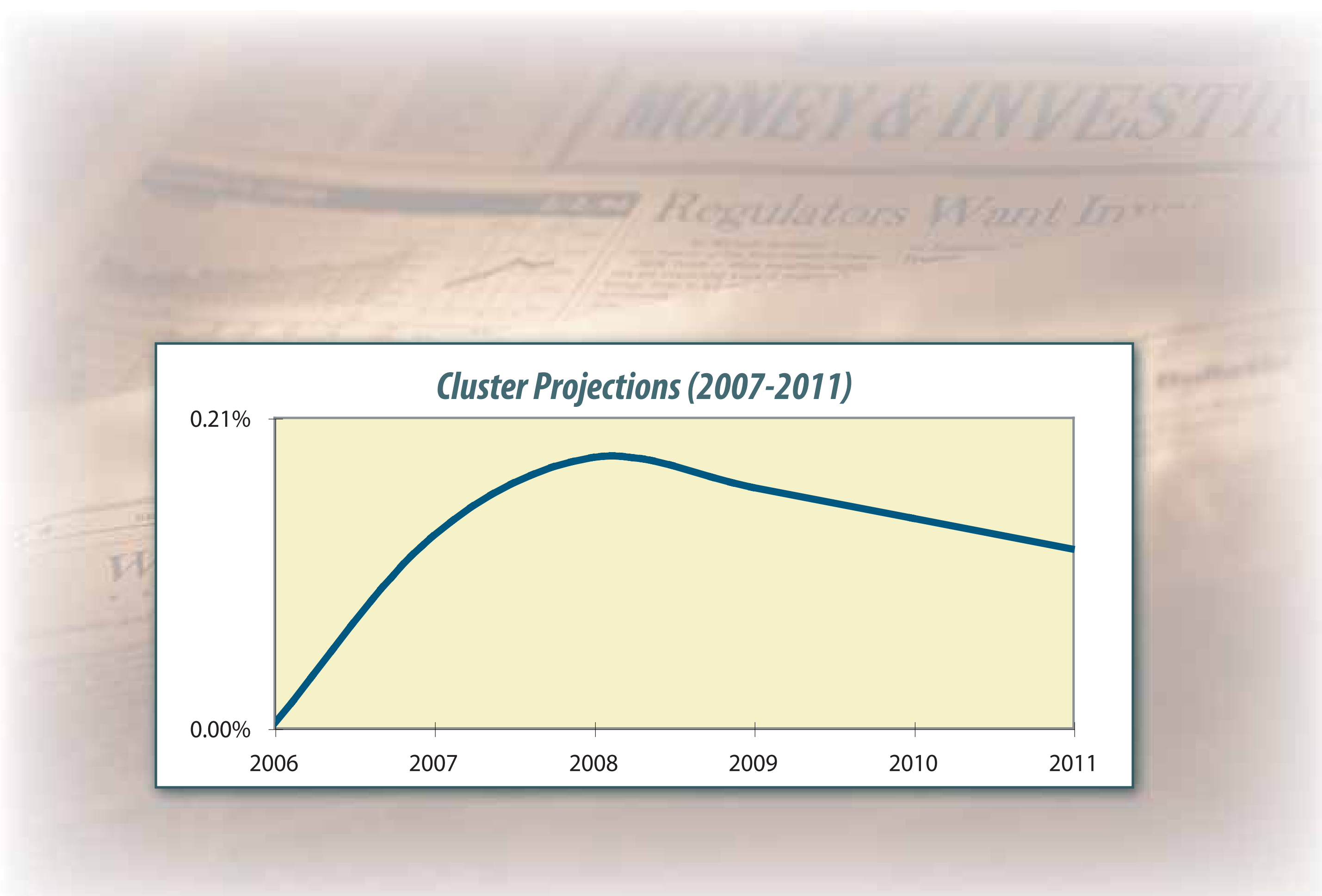


What's Next for Finance?

The financial industries group includes businesses involved in banking, insurance, tax preparation and those dealing with investment and financial management. As a group, these industries are enjoying increased revenues, establishment growth, and greater average salaries throughout the state of Missouri. This profitable relationship has led to Missouri becoming one of the leading states for consumer lending, tax preparation and securities brokerage firms throughout all of America. This is a trend expected to continue in the future, with business consolidations and workload automations helping to fuel this economic growth.

The changes within the financial industries are also having a melding effect on the services being provided by the various businesses. As an example, with more borrowing opportunities being provided by nontraditional banking institutions, banks are searching for new revenue sources such as insurance coverage and portfolio management. This trend is expected to continue, with occupations and services becoming less segregated by business type.

The employment outlook in the financial industries is mostly driven by advances in technology and the changing habits of consumers in response to these new technologies. The increased use of automation, imaging and internet based technologies are resulting in an increased demand for employees with computer and technological backgrounds. As consumers increase their understanding and usage of online banking and investment services, some more traditional careers within the financial industries are on the decline. Overall employment in the Financial Industries is projected to remain stable, with just moderate fluctuations due to changing economic conditions.



Cluster Statistics

- Number of Businesses (2006) 9,769
- Number of Jobs (2006) 132,036
- Percent of Total Missouri Jobs (2006) 5.75%
- Average Annual Wages (2005) $52,206
- Location Quotient (2006) 1.04
- Percent Change from 2001 Location Quotient .... -2.34%
- Net Percent Change in Jobs (2001-2006) 1.4%
- Total Change in Jobs (2001-2006) 1,798

Employment Change from 2001 attributed to:

- National Factors 3,343
- Industry Factors 3,204
- Missouri's Competitiveness .... -4,749

Top Five Industries

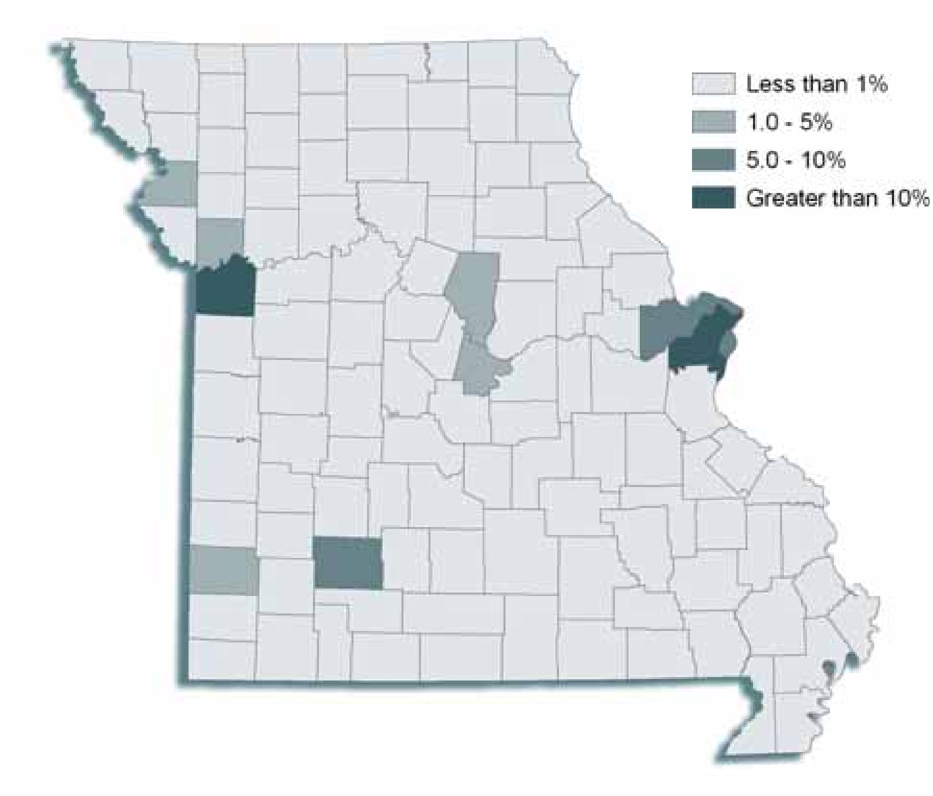
- Commercial banking
- Direct property and casualty insurers
- Real estate credit
- Securities brokerage
- Offices of certified public accountants

54.5% of Cluster Jobs

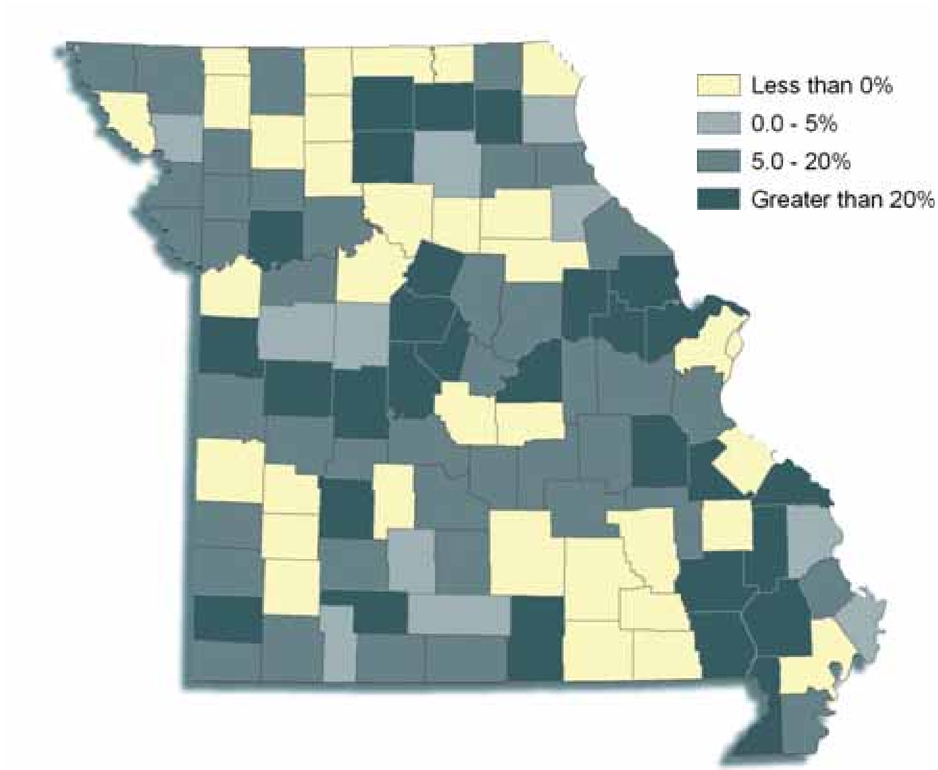
Targeted Occupations with Projected Growth and Current Wage

13% of Cluster Occupations	Current Wage	Projected Growth 2004–2014
Computer Systems Analysts	$66,990	19.10%
Claims Adjusters, Examiners, and Investigators	$45,220	16.70%
Customer Service Representatives	$29,480	16.00%
Business Operations Specialists	$52,310	15.80%
General and Operations Managers	$92,330	11.50%

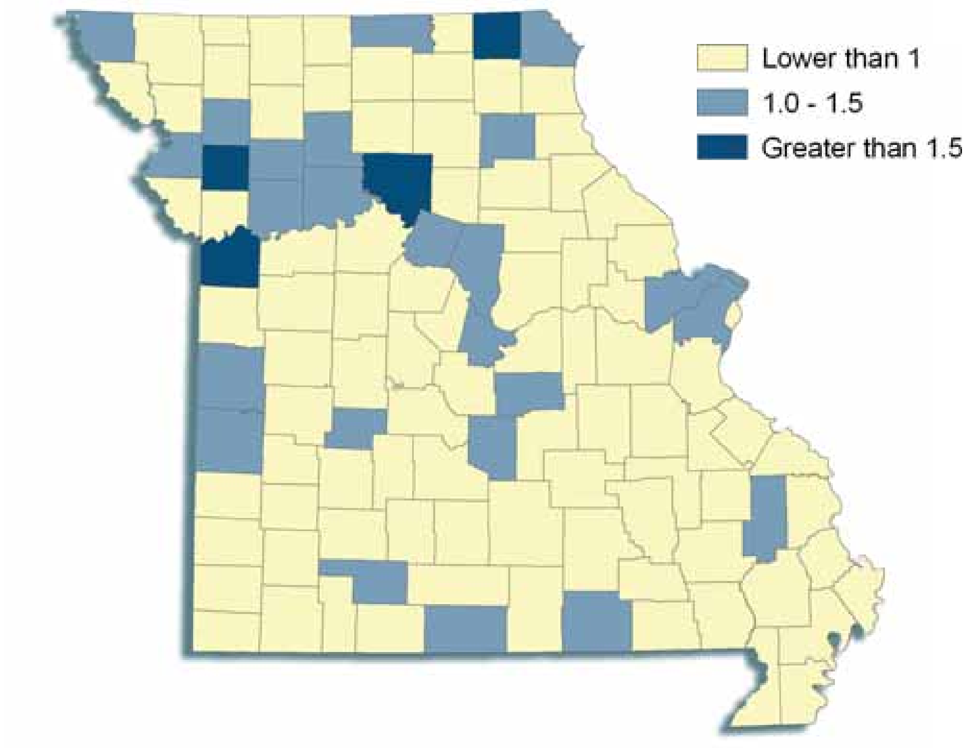
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



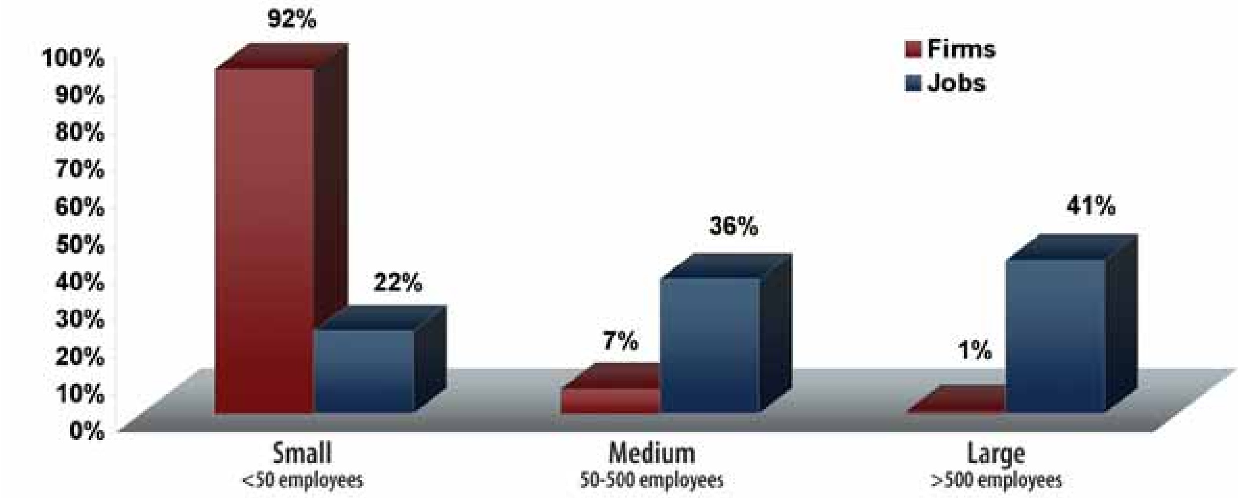
Location Quotient by County (2006)



Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
521110	Monetary authorities - central bank	4.54	10.01%
524298	All other insurance related activities	3.05	63.39%
523999	Miscellaneous financial investment activities	2.58	-57.43%
525110	Pension funds	2.39	487.24%
524130	Reinsurance carriers	1.97	59.46%
524128	Other direct insurance carriers	1.89	283.84%
522190	Other depository credit intermediation	1.77	9.65%
541213	Tax preparation services	1.60	-18.44%
523120	Securities brokerage	1.46	33.28%
522110	Commercial banking	1.32	-10.31%
524127	Direct title insurance carriers	1.32	0.55%
522292	Real estate credit	1.26	6.49%
541219	Other accounting services	1.24	-33.21%
522291	Consumer lending	1.16	23.42%
524291	Claims adjusting	1.14	1.09%

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

521110	Monetary Authorities - Central Bank
522110	Commercial Banking
522120	Savings Institutions
522130	Credit Unions
522190	Other Depository Credit Intermediation
522210	Credit Card Issuing
522220	Sales Financing
522291	Consumer Lending
522292	Real Estate Credit
522293	International Trade Financing
522294	Secondary Market Financing
522298	All Other Nondepository Credit Intermediation
522310	Mortgage and Nonmortgage Loan Brokers
522320	Fin. Trans. Processing, Reserve, & Clearinghouse Activities
522390	Other Activities Related to Credit Intermediation
523110	Investment Banking and Securities Dealing
523120	Securities Brokerage
523130	Commodity Contracts Dealing
523140	Commodity Contracts Brokerage
523210	Securities and Commodity Exchanges
523910	Miscellaneous Intermediation
523920	Portfolio Management
523930	Investment Advice
523991	Trust, Fiduciary, and Custody Activities
523999	Miscellaneous Financial Investment Activities
524113	Direct Life Insurance Carriers
524114	Direct Health and Medical Insurance Carriers
524126	Direct Property and Casualty Insurance Carriers
524127	Direct Title Insurance Carriers
524128	Other Direct Insurance *(except Life, Health, & Medical)* Carriers
524130	Reinsurance Carriers
524291	Claims Adjusting
524292	Third Party Administration of Insurance & Pension Funds
524298	All Other Insurance Related Activities
525110	Pension Funds
525120	Health and Welfare Funds
525190	Other Insurance Funds
525910	Open-End Investment Funds
525920	Trusts, Estates, and Agency Accounts
525930	Real Estate Investment Trusts
525990	Other Financial Vehicles
541211	Offices of Certified Public Accountants
541213	Tax Preparation Services
541214	Payroll Services
541219	Other Accounting Services

Investment and Financing Subcluster–Definition

This Finance sub-cluster focuses on industries primarily engaged in managing interest -accruing funds and accounts, and offering loan services to individuals and business entities.

Missouri's Strengths

Investment

Securities brokerage is a major employer and a growing export industry within this sub-cluster. Another top employer in this cluster is investment advice services. Other export industries in this group are involved in trust, fiduciary, custody, and other miscellaneous financial investment activities. Edward Jones, AG Edwards, H&R Block, and National Financial Data Services are examples of investment companies.

Financing

Real estate credit and consumer lending industries are top employers and growing exporters in this sub-cluster. Another major sub-cluster employer within this area is loan brokering services. Citimortgage, MasterCard International, UMB, and Systems & Service Technologies are included in financing services.

Key Locations

The largest Investment and Financing employing areas are in St. Charles, St. Louis and Jackson counties. The highest growth areas are in the southwest, central, west central and north central regions, along with counties northwest and south of St. Louis. Areas of high cluster concentration include St. Charles and Jackson counties.

Factoid:

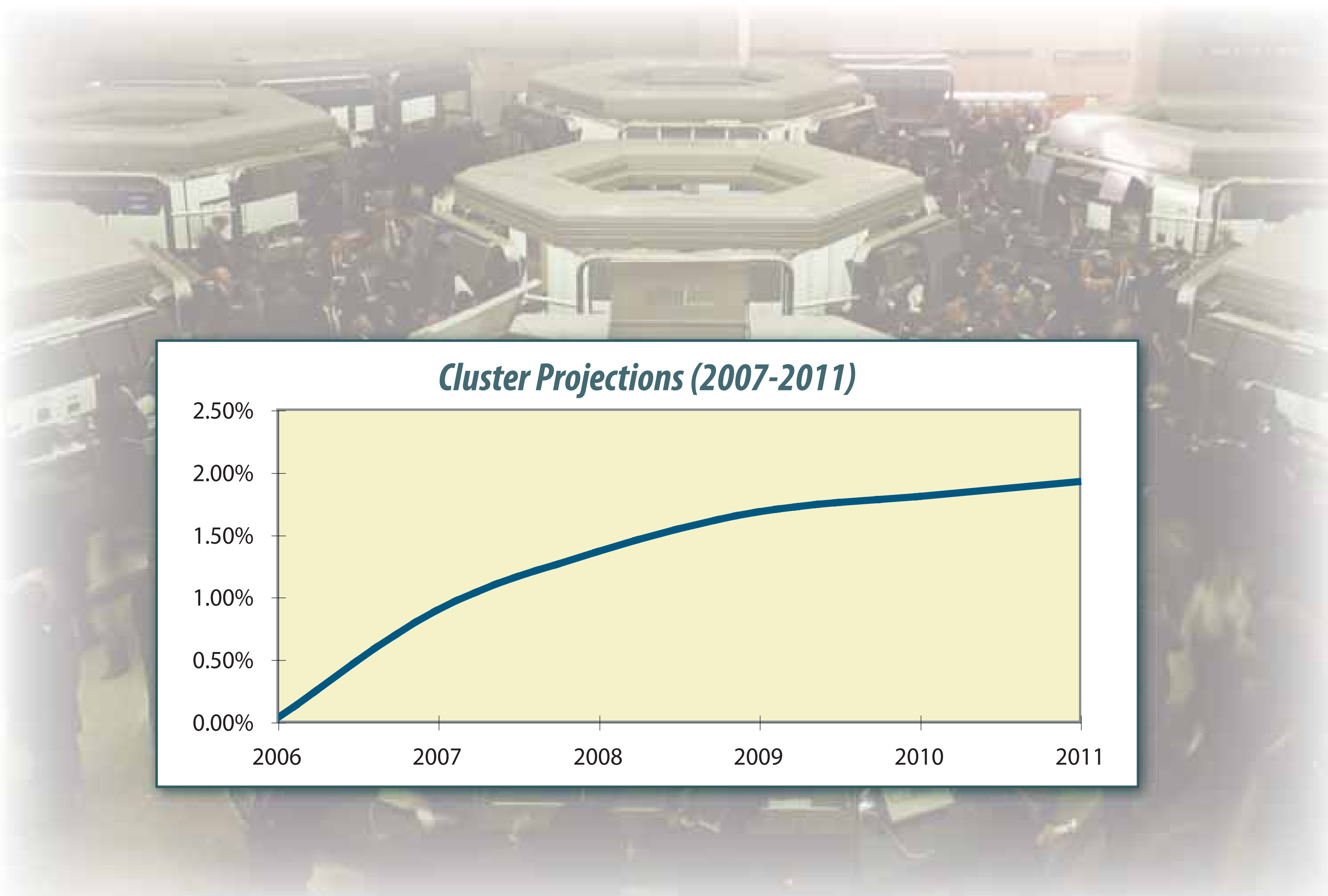
- The Presidential Dollar Coin for Harry S. Truman will be released in 2015.
- Second home buyers are usually between 41-44 years old.
- Laclede Gas Light Company, incorporated in Missouri, was one of the twelve original Dow Jones Industrial Stocks, in 1896.
- The Kansas City Board of Trade is the second oldest commodities exchange in the Nation.

What's Next in Investment and Financing?

An important sub-cluster of the financial industries group includes investment and financing. These businesses are primarily engaged in managing interest-accruing funds and accounts, and offering loan services to individuals and businesses alike. This sub-cluster alone accounts for 1.6% of total Missouri jobs with average wages above $66,000. Missouri is enjoying an increasing presence of these industries in terms of employment, up nearly 16.5% in the last five years. This is due in part to its solid base of securities brokerage, lending and investment enterprises, along with less restrictive legislation on financial activities.

Some concerns exist in this industry regarding the growing consumer debt-to-savings ratio. Legislative action in bankruptcy and credit card reform has sought to resolve issues that face both the lenders and consumers. However, defaults on loans, particularly with mortgages, are happening at an increased pace. In addition, higher interest short-term loan establishments have dramatically increased in number.

Much like the financial industries group as a whole, this sub-cluster is being greatly affected by cyclical business patterns, consolidation, automation and changing customer habits. For instance, this sub-cluster of financial institutions is also benefiting from continuing increases in investment over savings by both businesses and individuals. All of these factors should aide these Missouri businesses in continuing their movement towards greater market shares, improved efficiencies and increased company profits.



Cluster Statistics

• Number of Businesses (2006)	3,465
• Number of Jobs (2006)	36,583
• Percent of Total Missouri Jobs (2006)	1.59%
• Average Annual Wages (2005)	$66,633
• Location Quotient (2006)	0.93
• Percent Change from 2001 Location Quotient	4.86%
• Net Percent Change in Jobs (2001-2006)	16.4%
• Total Change in Jobs (2001-2006)	5,167
Employment Change from 2001 attributed to:	
• National Factors	806
• Industry Factors	3,072
• Missouri's Competitiveness	1,288

Top Five Industries

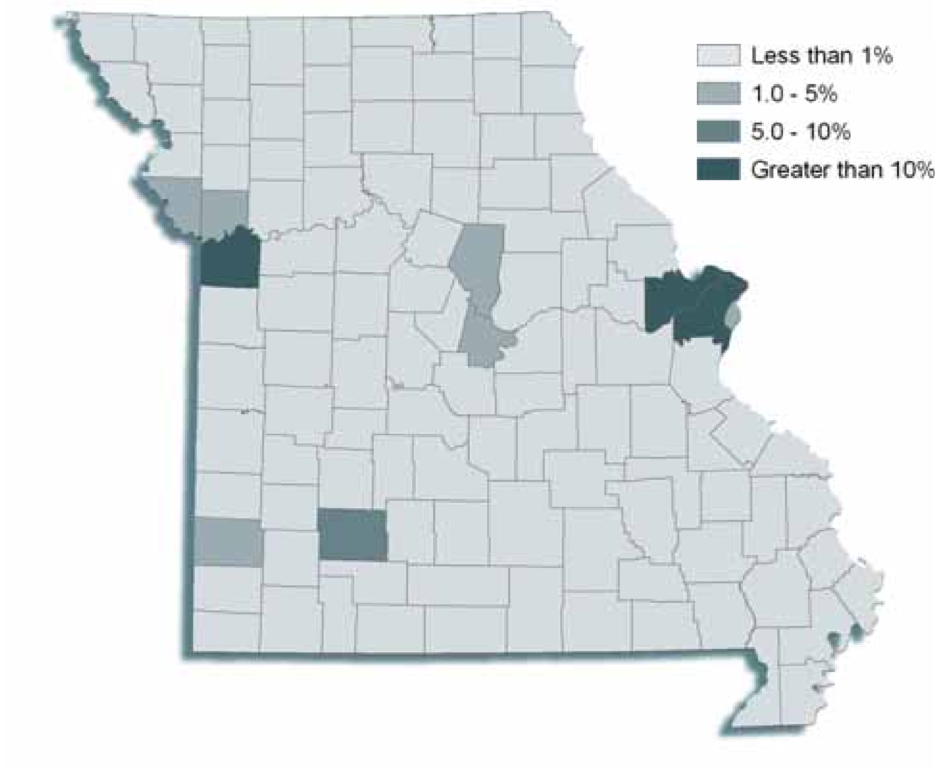
- Real estate credit
- Securities brokerage
- Consumer lending
- Loan brokers
- Investment advice

68.1% of Cluster Jobs

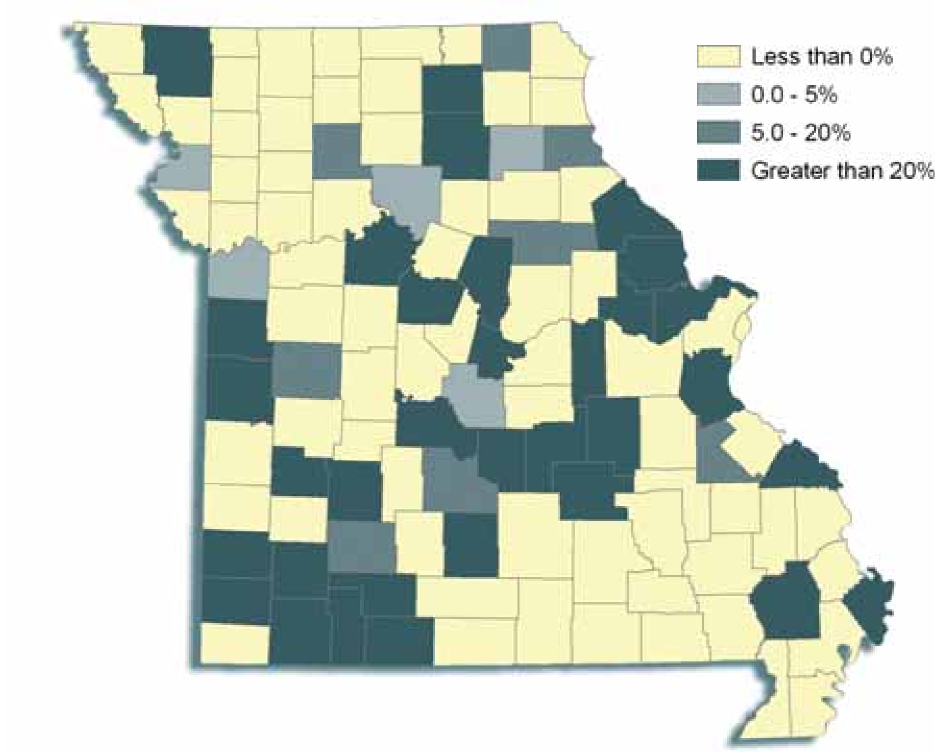
Targeted Occupations with Projected Growth and Current Wage

6% of Cluster Occupations	*Current Wage*	*Projected Growth 2004–2014*
Network Systems and Data Communications Analysts	$58,260	43.60%
Computer Software Engineers	$74,330	34.40%
Network and Computer Systems Administrators	$57,330	31.40%
Computer Systems Analysts	$66,990	19.10%
Computer and Information Systems Managers	$94,990	19.10%

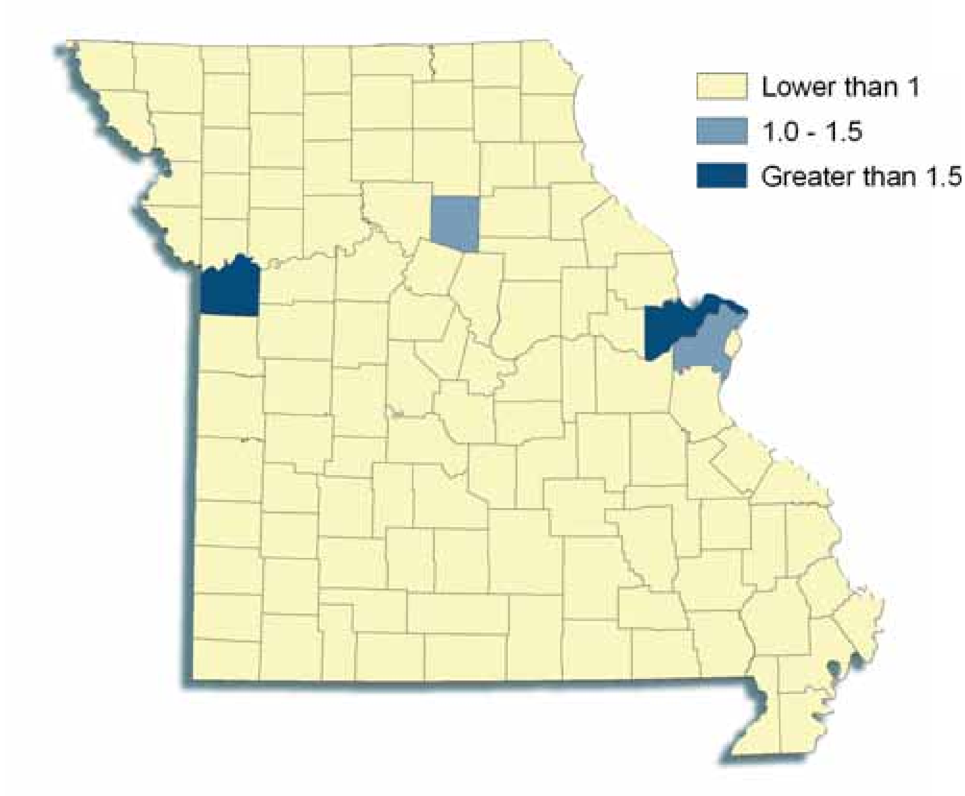
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



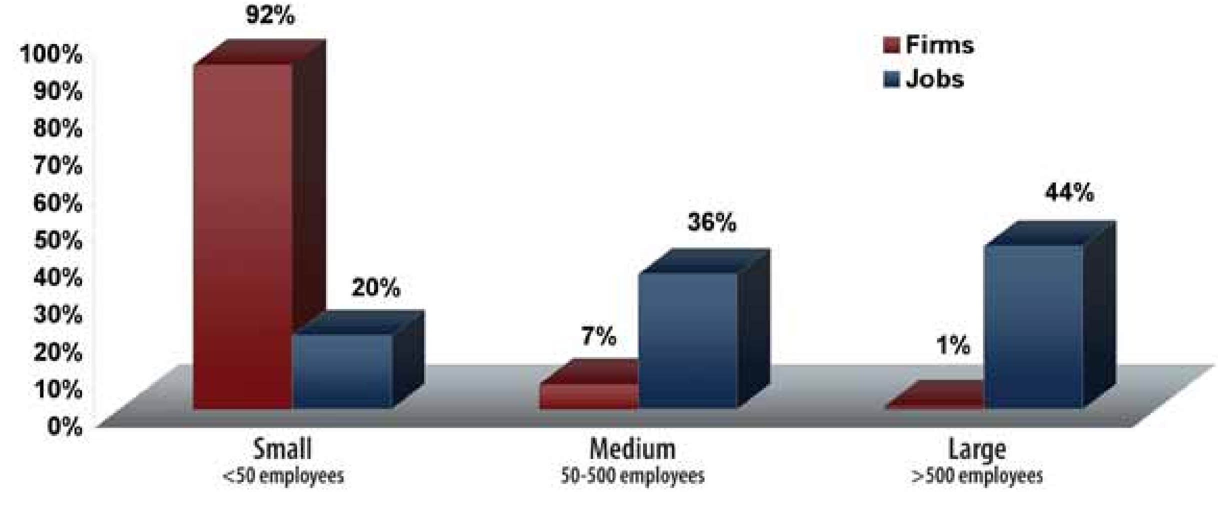
Location Quotient by County (2006)



Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
523999	Miscellaneous financial investment activities	2.58	-57.43%
523120	Securities brokerage	1.46	33.28%
522292	Real estate credit	1.26	6.49%
522291	Consumer lending	1.16	23.42%
523991	Trust, fiduciary, and custody activities	1.03	-20.74%

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

522210	Credit Card Issuing
522220	Sales Financing
522291	Consumer Lending
522292	Real Estate Credit
522293	International Trade Financing
522294	Secondary Market Financing
522298	All Other Nondepository Credit Intermediation
522310	Mortgage and Nonmortgage Loan Brokers
522320	Financial Transactions Processing, Reserve, and Clearinghouse Activities
522390	Other Activities Related to Credit Intermediation
523110	Investment Banking and Securities Dealing
523120	Securities Brokerage
523130	Commodity Contracts Dealing
523140	Commodity Contracts Brokerage
523210	Securities and Commodity Exchanges
523910	Miscellaneous Intermediation
523920	Portfolio Management
523930	Investment Advice
523991	Trust, Fiduciary, and Custody Activities
523999	Miscellaneous Financial Investment Activities

Positioning for the Future: H&R Block

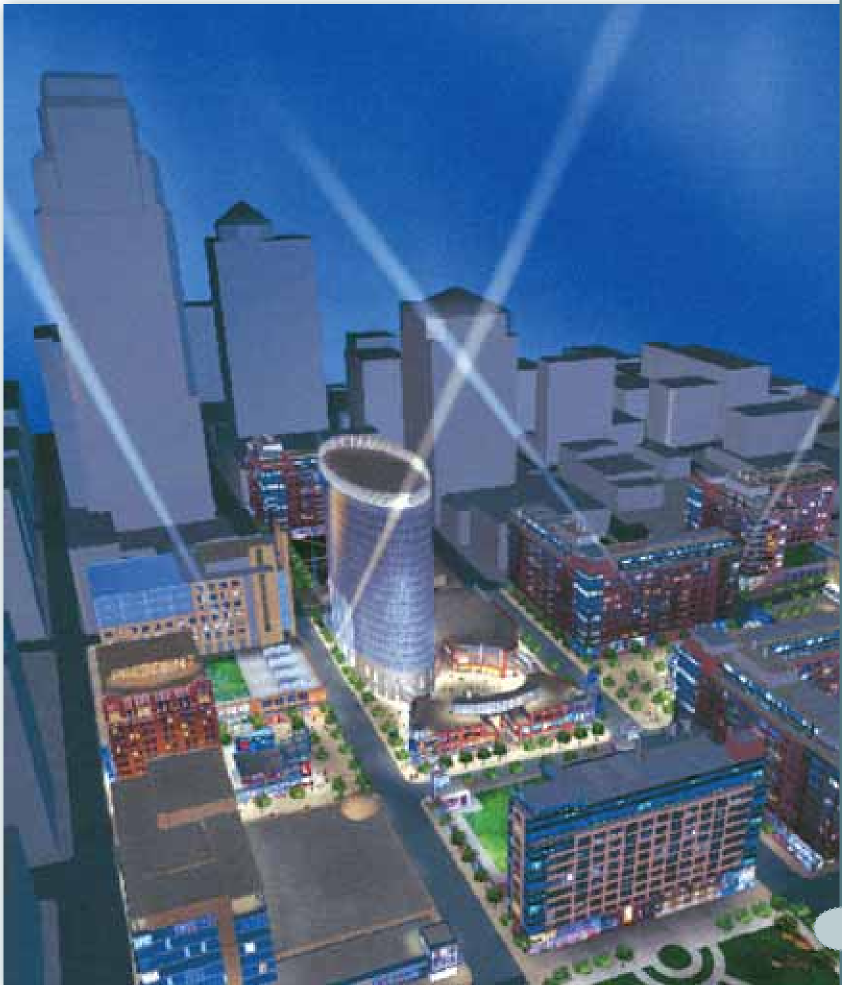
Ten Missouri-based companies made this year's Fortune magazine list of American Corporations with the highest revenues. These ten companies employ nearly 30,300 people in Missouri and pay wages totaling over $2.9 billion.

Among our state's Fortune 500 companies is a tax preparation and financial services firm that is well known...H&R Block. Like most of the nation's largest business enterprises, the reach of H&R Block's operations extend globally and its revenues are in the billions of dollars. Throughout its growth, the company has maintained deep roots in Missouri and is headquartered in Kansas City.

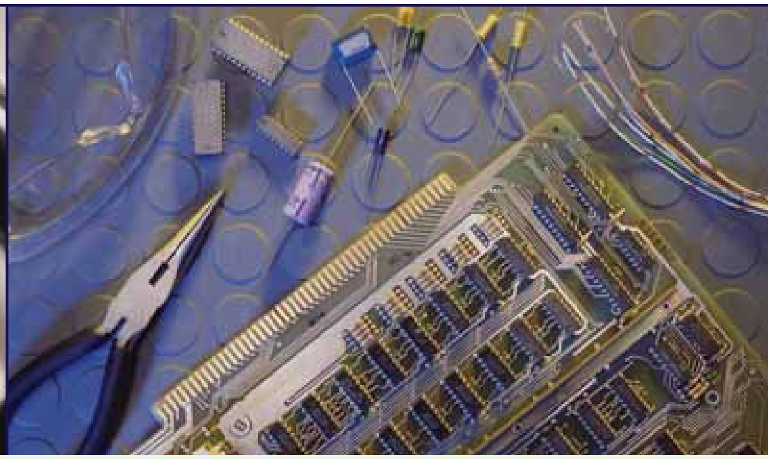
Serving more than 400 million clients at over 12,000 locations, H&R Block is the largest provider of tax services in the United States and ranks as the sixth biggest retailer in the world. H&R Block establishes one-to-one relationships with millions of clients worldwide, helping them benefit from all of the deductions and credits available to them.

But consumers today want more from their local H&R Block office than just tax preparation. They also want a complete personal financial partner. To meet the needs of its clients, H&R Block has transformed itself from a company focused exclusively on tax preparation to a company that provides comprehensive financial services. The "new" H&R Block has subsidiaries ready to offer a full range of tax solutions, combined with personalized financial advice and a complete menu of financial services.

H&R Block just celebrated the opening of its new headquarters-H&R Block Center- in downtown Kansas City. The site combines 1,600 company associates from other locations in the Kansas City area. The 17 story high rise and its accompanying 3 story low rise structures will add to the overall appeal of Kansas City's downtown revitalization.

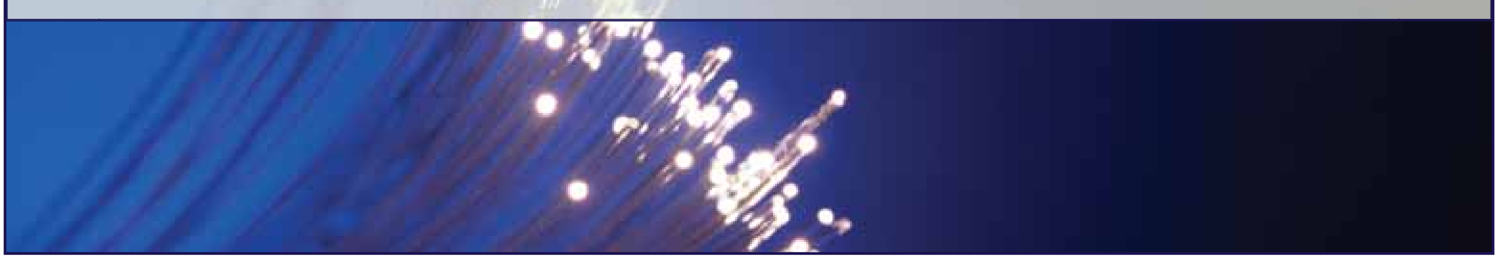


For Missouri to continue to succeed in today's fast paced global environment, our state must remain proactive and committed to helping our businesses, communities, and workers remain competitive and advance economically. By targeting high wage, high growth, and highly important financial service companies, such as H&R Block, our state is succeeding in doing just that.



INFORMATION

TECHNOLOGY



Information Technology–Definition

The Information Technology cluster is comprised of industries involved in the manufacturing of electronic components used in computers, communication devices, and other electronic devices. This cluster also includes planning and design of computer systems, software development, management consulting services, and research.

Missouri's Strengths

Communication Services

Wired and Cellular telecommunications are industries included in this group. Wired telecommunications is the top employer in this cluster. It also is a strong exporting industry with moderate growth. Cellular telecommunications has been growing over the last five years and is developing into an industry with significant employment in the state. Southwestern Bell, Centurytel, AT&T, MCI, and Sprint are included in the communications group.

Computers

Computer systems design is another major employer and exporting industry in this cluster. It has exhibited strong growth over the last five years. Custom computer programming services is also a large employer in this cluster. The software publishing industry is a comparatively small employer in this group but has seen high percentage growth in the past few years. Cerner Corporation, IBM, and Jack Henry are examples of companies in the computer group.

Electronics Manufacturing

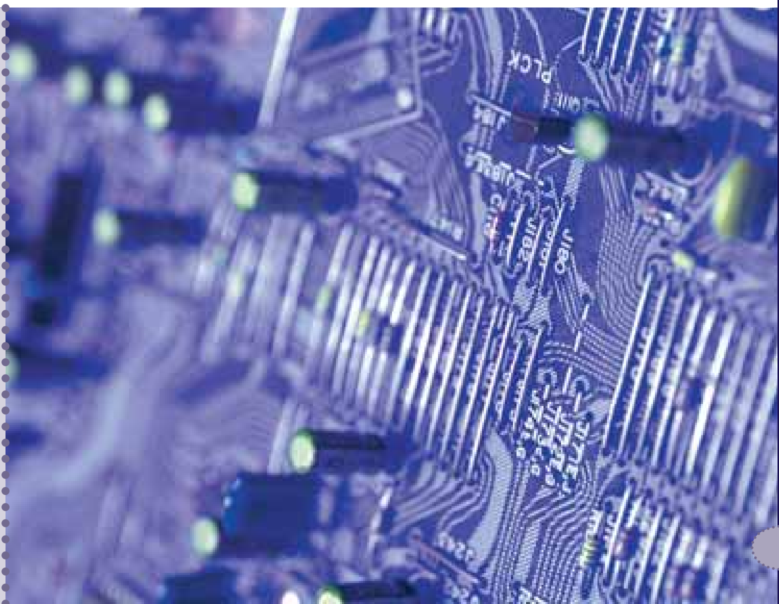
Some of Missouri's fastest growing industries are in this group. These businesses include printed circuit assembly, electron tube, and electronic component manufacturing. Electronic connector manufacturing is the strongest exporter in the cluster. MEMC Electronic Materials, 3M, Northrop Grumman Interconnect, and Emerson are businesses involved in electronics manufacturing.

Key Locations

The largest employing areas in Information Technology are in St. Louis and Kansas City. Growth areas are exhibited across all Missouri regions. Areas of high cluster concentration include Barry, Wayne, St. Clair, Clay, and Caldwell counties.

Factoid:

- The first AT&T mobile telephone call was placed by a driver in St. Louis in 1946.
- 68% of telephone lines in Missouri are residential.
- The number of High Speed Lines in the U.S. has more than doubled since 2004.
- The University of Missouri Columbia newspaper The Missourian developed the world's first live digital edition.

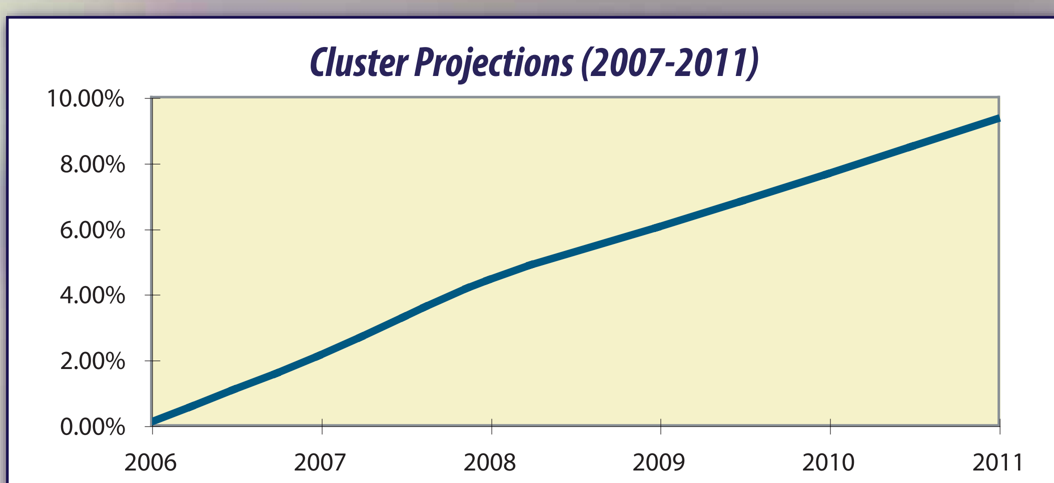


What's Next for Information Technology?

Information technology (IT) firms employ nearly 1.7% of Missouri's workforce, an increase of 10.8% since 2001. Employment growth in this cluster exceeds both the national and industry employment growth rates. Much of this success can be attributed to the state's strong commitment to the advancement of life sciences using advanced information technologies in human genome studies, pharmaceutical research, and other research along the life science corridor. Also, a strong presence in other technologically integrated industries, such as telecommunications, financial services, and defense, has helped make Missouri competitive in IT.

IT firms may be more responsive, adaptable, and susceptible to advances in technology than any other targeted cluster. Telecommunications companies are responding to customer demands with regards to the transmission of data, graphics, and video. Wired telecommunication firms are increasing bandwidth by installing fiber optic cables and boosting speeds with Digital Subscriber Lines (DSL). Wireless firms are increasingly becoming more competitive by allowing consumers to receive high speed video transmissions from nearly anywhere using third generation (3G) wireless access. Employment in telecommunications is expected to decrease as consolidation and technology streamline monitoring processes and customer services. However, the need for computer specialists, electronics engineers, and researchers is expected to increase.

The software publishing industry is expected to be the third fastest growing industry in the nation over the next decade. Rapidly changing technologies will require ongoing software creation and updates. Firms in all industries are expected to increase investment in e-commerce activity, security features, and other business use applications. Educators, researchers, and life science industries will continue to require highly specialized software applications. Electronic and computer products geared for household and personal use will also rely on updated software components. While some outsourcing of routine tasks is presumed, highly trained IT professionals should continue to see employment growth in the state with many job opportunities at competitive wages.



Cluster Statistics

- Number of Businesses (2006) 2,345
- Number of Jobs (2006) 38,604
- Percent of Total Missouri Jobs (2006) 1.68%
- Average Annual Wages (2005) $70,938
- Location Quotient (2006) 0.79
- Percent Change from 2001 Location Quotient 8.69%
- Net Percent Change in Jobs (2001-2006) 10.8%

- Total Change in Jobs (2001-2006) 3,760

Employment Change from 2001 attributed to:

- National Factors 894
- Industry Factors 195
- Missouri's Competitiveness 2,670

Top Five Industries

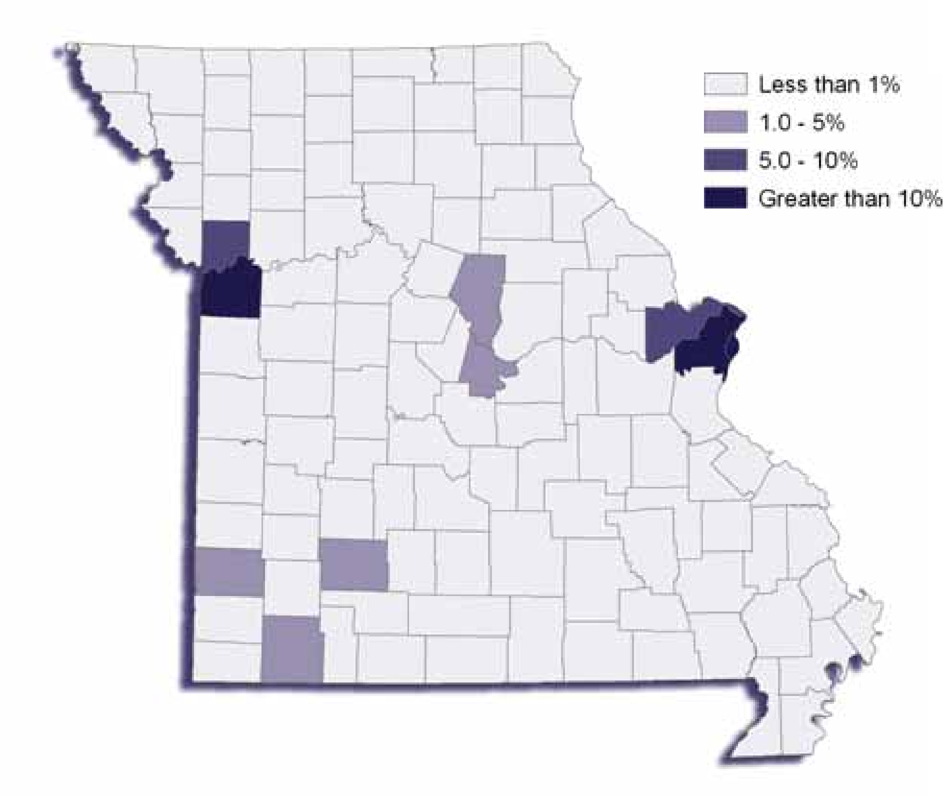
- Wired telecommunications carriers
- Computer systems design services
- Physical, engineering and biological research
- Custom computer programming services
- Software publishers

85.4% of Cluster Jobs

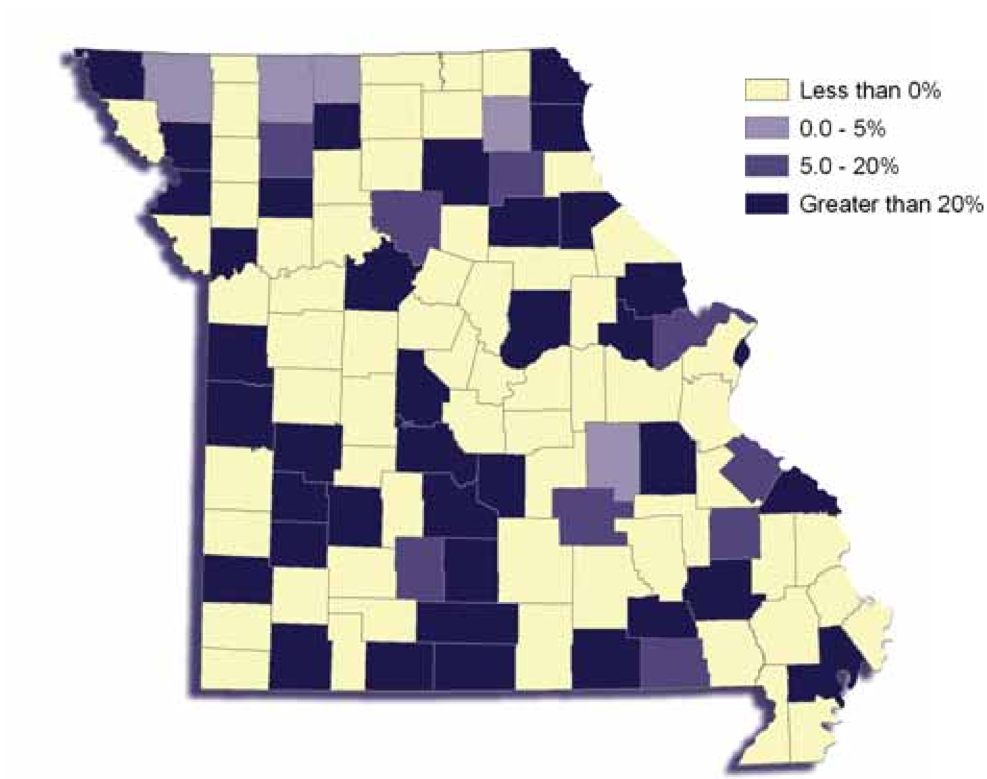
Targeted Occupations with Projected Growth and Current Wage

IT (16% or more of Cluster Occupations)	Current Wage	Projected Growth 2004–2014
Network Systems and Data Communications Analysts	$58,260	43.60%
Computer Software Engineers, Systems Software	$73,270	39.30%
Computer Software Engineers	$74,330	34.40%
Computer and Information Systems Managers	$94,990	19.10%
Computer Systems Analysts	$66,990	19.10%

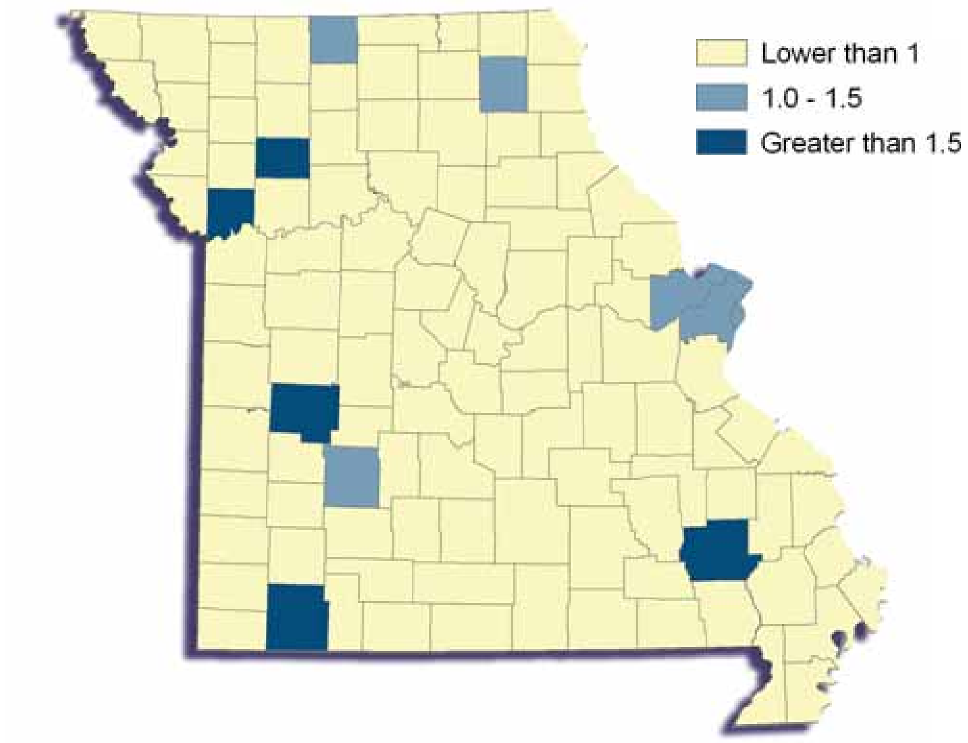
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



Location Quotient by County (2006)

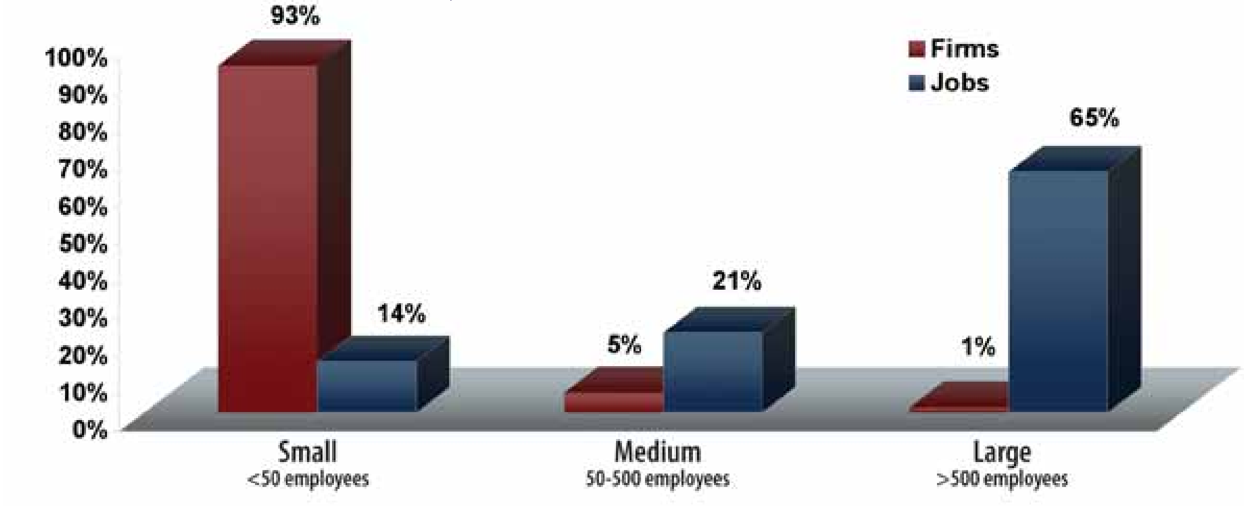


Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
334417	Electronic connector manufacturing	2.51	-23.93%
517110	Wired telecommunications carriers	1.80	2.84%
541512	Computer systems design services	1.07	18.40%
334419	Other electronic component manufacturing	0.88	54.01%
541710	Physical, engineering and biological research	0.85	59.68%
334418	Printed circuit assembly manufacturing	0.73	426.05%
334411	Electron tube manufacturing	0.71	n/a*
511210	Software publishers	0.71	22.76%
517212	Cellular and other wireless carriers	0.70	7.64%

** Industry did not exist in Missouri in 2001.*

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

334210	Telephone Apparatus Manufacturing
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing
334411	Electron Tube Manufacturing
334412	Bare Printed Circuit Board Manufacturing
334413	Semiconductor and Related Device Manufacturing
334414	Electronic Capacitor Manufacturing
334415	Electronic Resistor Manufacturing
334416	Electronic Coil, Transformer, and Other Inductor Manufacturing
334417	Electronic Connector Manufacturing
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing
334419	Other Electronic Component Manufacturing
511210	Software Publishers
517110	Wired Telecommunications Carriers
517211	Paging
517212	Cellular and Other Wireless Telecommunications
541511	Custom Computer Programming Services
541512	Computer Systems Design Services

Missouri Home-Grown Entrepreneurs: Jack Henry & Associates

One of our state's largest information technology firms, and a leader for technology solutions in its field, is located in a place far removed from the hustle and bustle of the big city.

In 1976, Jack Henry and Jerry Hall began their business with a borrowed computer and an idea for providing in-house data processing solutions for small community banks. Eventually, they picked up a few clients and moved into an office in the back of a tire shop in Monett, Missouri. Located at the county line of Barry and Lawrence in the southwest corner of the state, this town of 7,400 became headquarters for Jack Henry & Associates.

Jack Henry & Associates played a key role in the survival of small community banks by offering them technology that kept them competitive. The company grew steadily and in 1985 became a publicly held company listed on the NASDAQ.

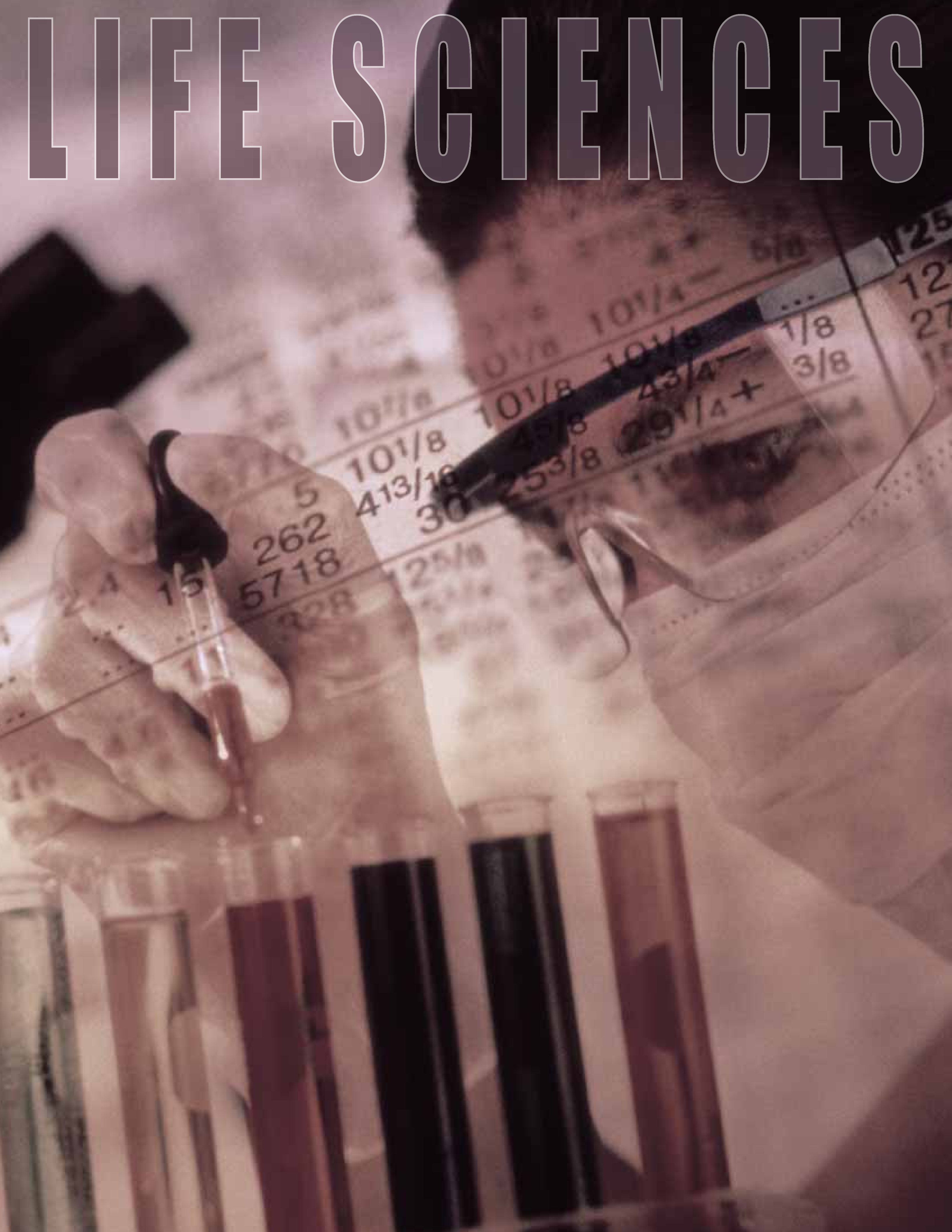
Throughout the 1990s and into the new century the company continued to grow... earning recognition along the way like Top 100 Small Business in America; Top 10 Growth Company in the 1990s, Outstanding National Business Partner for IBM, and more.

Today, Jack Henry & Associates is a leading provider of integrated technology solutions and data processing services for financial institutions. The company markets and supports its systems throughout the United States, with thousands of customers nationwide.

The company which began renting space in a repair shop now sits on a 138 acre corporate campus in Monett employing over 1,100 professionals, and more than 3,400 workers in 50 offices nationwide. Since the late 1970s, they have developed from one client to more than 8,700. Their five industry-leading, competitively distinct platforms are surrounded by more than 100 complementary products and services earning them nearly $600 million in revenue in 2006.

Entrepreneurs, like Jack Henry and Jerry Hall, play a vital role in local economic development as key contributors to technological innovation, new investments, and new job growth. Home-grown entrepreneurs also add to their communities by conducting business locally, investing in community projects, and giving to local charities. The economic and social benefits from successful entrepreneurship can extend to the many.

LIFE SCIENCES



Life Sciences–Definition

The Life Sciences cluster focuses on industries involved in the enhancement of quality of life through psychosocial, biological, medical research and engineering. It is also comprised of chemical and medical device manufacturing.

Missouri's Strengths

Industries within the Life Sciences cluster are enhanced by Missouri's quality universities and hospitals, highly skilled researchers, cutting edge technology, and strong agricultural base.

Pharmaceutical / Chemical Manufacturing

Pharmaceutical Manufacturing is a large employing industry in this cluster and an international exporter. Companies such as Pfizer Incorporated, K-V Pharmaceutical, and Aventis are involved in this type of activity. Agricultural chemical product manufacturing is a key growth industry for this cluster represented by the Monsanto and Bayer Corporations. Along with organic chemical manufacturers, such as Sigma-Aldrich Corporation, biological product manufactures represent the fastest growing sectors in this area.

Biological Research and Medical Laboratories

Other large employers and exporters within the life sciences segment in Missouri involve biological and medical research, and medical laboratory services. Types of research include studies on cancer, bone marrow, cholesterol, medical devices, medications, plant genomes, and agricultural enhancements. Laboratory services have grown substantially in the last five years and include processing patient samples, and genetic testing. Saint Luke's Regional Labs, Stowers Institute, and LabCorp are examples from this industry group.

Medical Instrument and Laboratory Equipment Manufacturing

Both Laboratory Equipment and Medical Instrument Manufacturing are considered sizable employers in the state. Types of equipment include microbial detection, molecular diagnostics, immunoassay, clinical software, pathogen detection, refractive laser surgery devices, and weighing systems. Related companies include Bio Merieux Inc., Bausch & Lomb Surgical, and Cardinal Scale.

Key Locations

The largest Life Science employing areas are located mainly in the St. Louis and Kansas City metro areas, and Boone and Greene counties. The highest growth areas include the I-70 corridor, the Ozarks region, the southeast, the northeast, and the southwest. Areas with high cluster concentrations include Holt, Audrain, Pike, Marion, and Buchanan counties, and St. Louis.

Factoid:

- Missouri ranks 3rd in Percent of Patents in Biopharmaceuticals.
- University of Missouri-Columbia and Washington University account for 90% of all university life science research in the state.
- 49% of the corn grown in Missouri is genetically modified.
- George Washington Carver, a Missouri native and early Life Science researcher, created 325 products from the peanut.

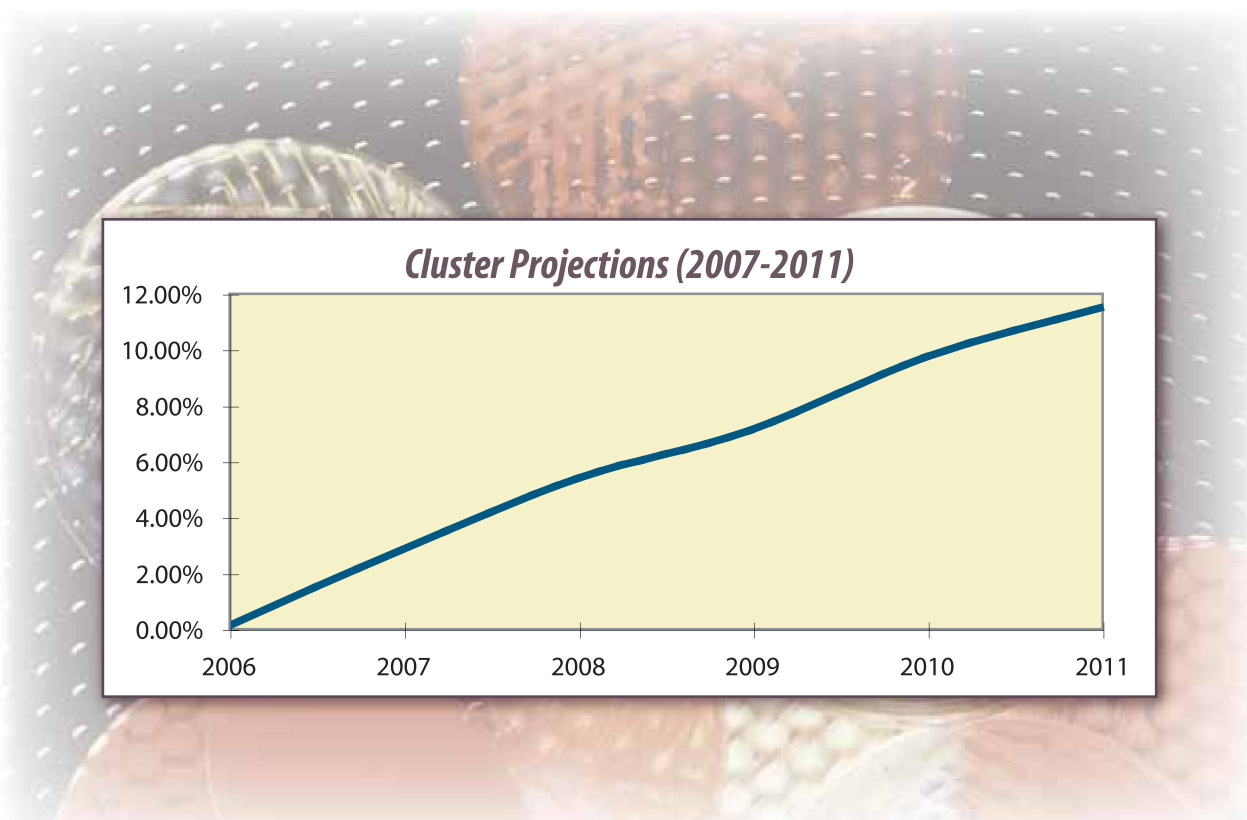
What's Next for Life Sciences?

Life science is an important and growing economic driver in Missouri. This diverse palette of research and manufacturing industries make up 1.2% of total jobs in the state, with 17% employment growth over the past five years. The University of Missouri-Columbia Life Science Center estimates their overall economic impact at $440 million.

Life sciences are both sustained by and support the health care industry. The rapid expansion in health care is expected to continue with the demands presented by population growth, aging, outpatient services, and long term care. In turn, the life science industry supplies those demands with new products and techniques. Agriculture also benefits from life science products with advancements in plant science and genetic engineering.

The challenge for the industry is in transitioning the research into marketable products; sometimes under considerable financial risk and speculation. Industry concerns for the future involve public opinion, legislation, and consequently market trends related to genetically modified foods, stem cell research, the label "organic," and pesticide use. Other concerns involve the expiration of patents, particularly in pharmaceutical industries where the loss in revenue to generic drugs may limit companies' ability to fund future research and development.

Missouri is positioning itself to be a leader in this industry by establishing and promoting a life sciences corridor built on the strengths of universities and companies based in St. Louis, Columbia, Kansas City, and Rolla. UM-Columbia recently opened the Life Sciences Center and is developing a technology incubator. Plans have also been announced for a 1,450 acre agricultural experiment station and research park in Columbia. UM-Kansas City is building a Health Sciences Building and collaborates with the Stowers Institute. UM-St. Louis collaborates with the Donald Danforth Plant Science Center, Washington University, the Missouri Botanical Garden, and incubators including the Center of Emerging Technologies, and the Center of Research Technology and Entrepreneurial Enterprise (CORTEX).



Cluster Statistics

- Number of Businesses (2006) 1,034
- Number of Jobs (2006) 31,295
- Percent of Total Missouri Jobs (2006) 1.36%
- Average Annual Wages (2005) $66,505
- Location Quotient (2006) 0.91
- Percent Change from 2001 Location Quotient 11.95%
- Net Percent Change in Jobs (2001-2006) 17.4%
- Total Change in Jobs (2001-2006) 4,629

Employment Change from 2001 attributed to:

- National Factors 685
- Industry Factors 932
- Missouri's Competitiveness 3,013

Top Five Industries

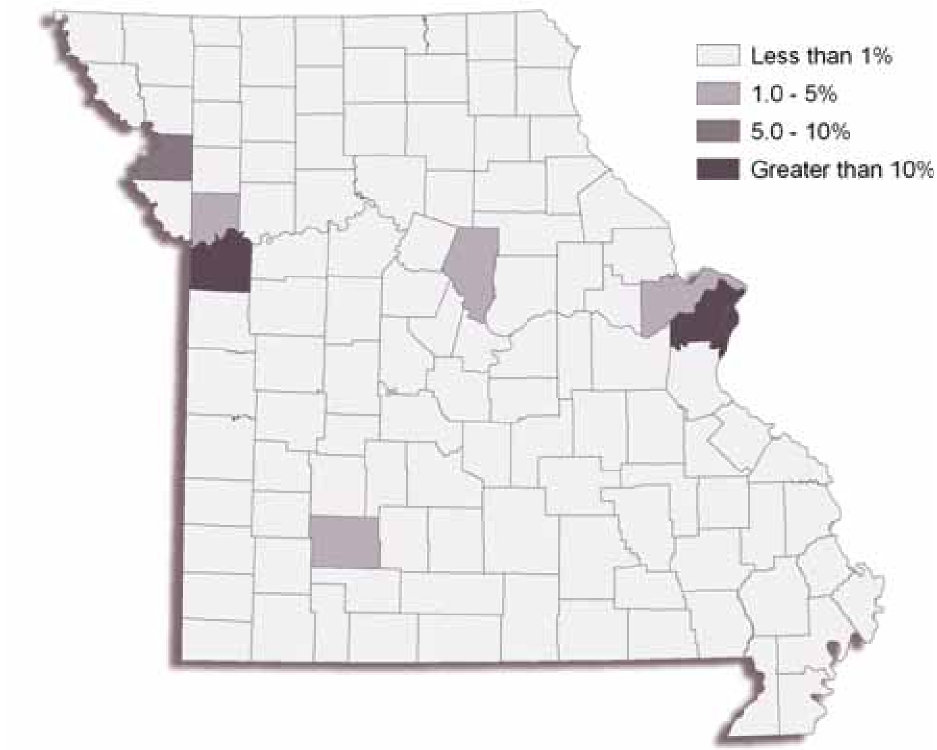
- Physical, engineering and biological research
- Pharmaceutical preparation manufacturing
- Pesticide and other ag. chemical mfg.
- Medical laboratories
- Surgical and medical instrument manufacturing

76.9% of Cluster Jobs

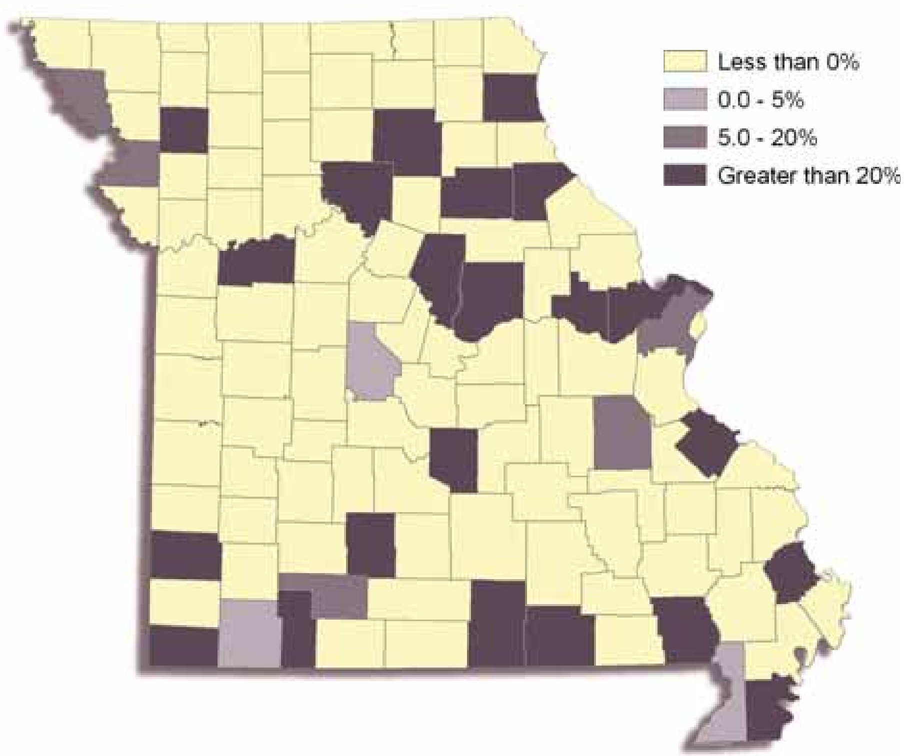
Targeted Occupations with Projected Growth and Current Wage

15% of Cluster Occupations	Current Wage	Projected Growth 2004–2014
Medical Scientists	$59,910	30.00%
Medical and Clinical Laboratory Technicians	$28,800	19.10%
First-Line Supervisors/Managers	$47,950	4.30%
Team Assemblers	$28,570	4.30%
Chemists	$58,410	4.30%

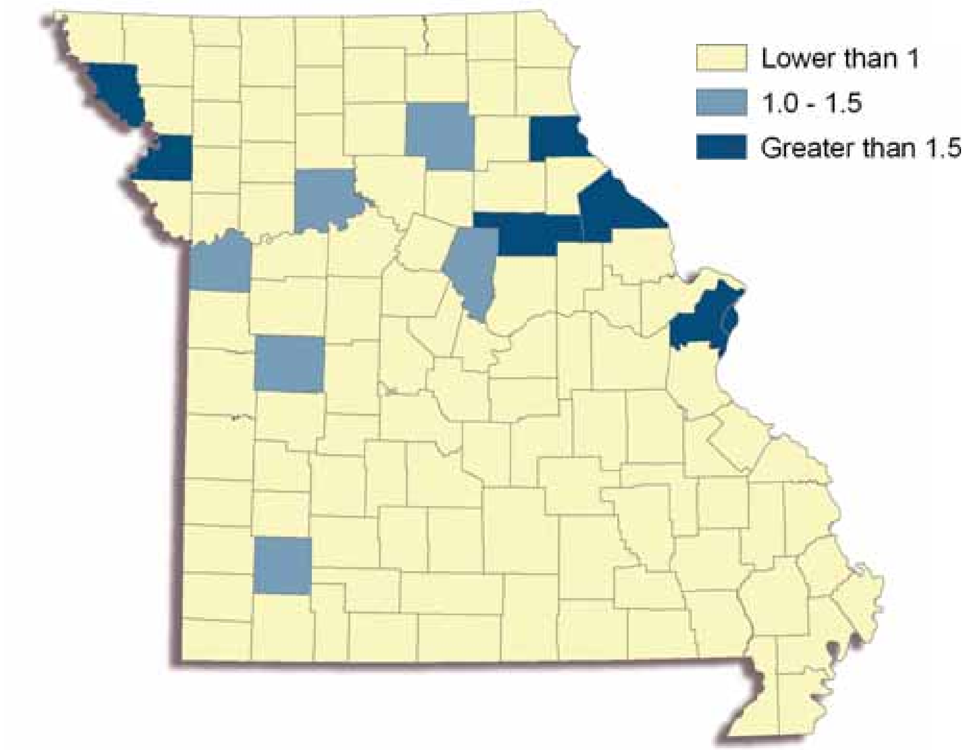
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



Location Quotient by County (2006)

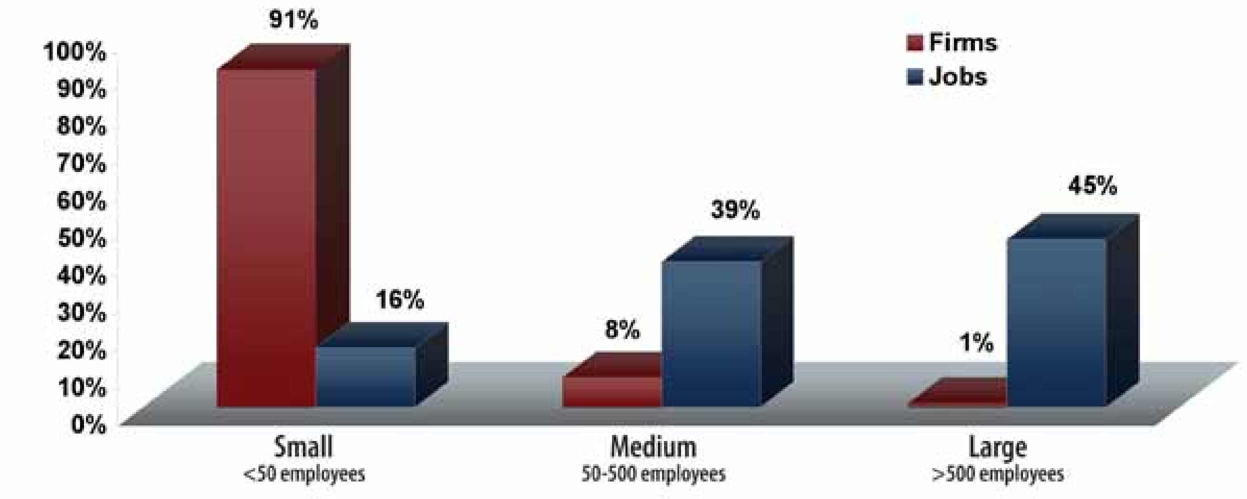


Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
325320	Pesticide and other ag. chemical mfg.	10.50	1.85%
325314	Fertilizer, mixing only, manufacturing	3.65	12.93%
311222	Soybean processing	3.08	-19.96%
325411	Medicinal and botanical manufacturing	2.71	-21.54%
325199	All other basic organic chemical mfg.	2.20	30.32%
311221	Wet corn milling	1.18	n/a*
339116	Dental laboratories	1.17	3.14%
325414	Other biological product manufacturing	1.15	18.60%
325193	Ethyl alcohol manufacturing	1.14	19.53%
339112	Surgical and medical instrument manufacturing	1.04	3.15%
621511	Medical laboratories	1.02	10.39%
339111	Laboratory apparatus and furniture mfg.	1.00	-3.80%

Industry did not exist in Missouri in 2001

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

311221	Wet Corn Milling
311222	Soybean Processing
311223	Other Oilseed processing
325193	Ethyl Alcohol Manufacturing
325199	All Other Basic Organic Chemical Manufacturing
325221	Cellosic organic fiber manufacturing
325311	Nitrogenous Fertilizer Manufacturing
325312	Phosphatic Fertilizer Manufacturing
325314	Fertilizer (Mixing Only) Manufacturing
325320	Pesticide and Other Agricultural Chemical Manufacturing
325411	Medicinal and Botanical Manufacturing
325412	Pharmaceutical Preparation Manufacturing
325413	In-Vitro Diagnostic Substance Manufacturing
325414	Biological Product (except Diagnostic) Manufacturing
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing
334516	Analytical Laboratory Instrument Manufacturing
334517	Irradiation Apparatus Manufacturing
339111	Laboratory Apparatus and Furniture Manufacturing
339112	Surgical and Medical Instrument Manufacturing
339113	Surgical Appliance and Supplies Manufacturing
339114	Dental Equipment and Supplies Manufacturing
339115	Ophthalmic Goods Manufacturing
339116	Dental Laboratories
541380	Testing Laboratories
541710	Research & Development in the Physical, Engineering, & Life Sciences
621511	Medical Laboratories
621512	Diagnostic Imaging Centers

A Leader in Life Science: The University of Missouri-Columbia

The recent addition of the Life Science Center at the University of Missouri-Columbia has increased the overall research capacity at MU to more than six times that of any other public university in the state. University research and development spending of $220 million annually generates nearly twice that amount in economic activity and employs more than 9,000 people.

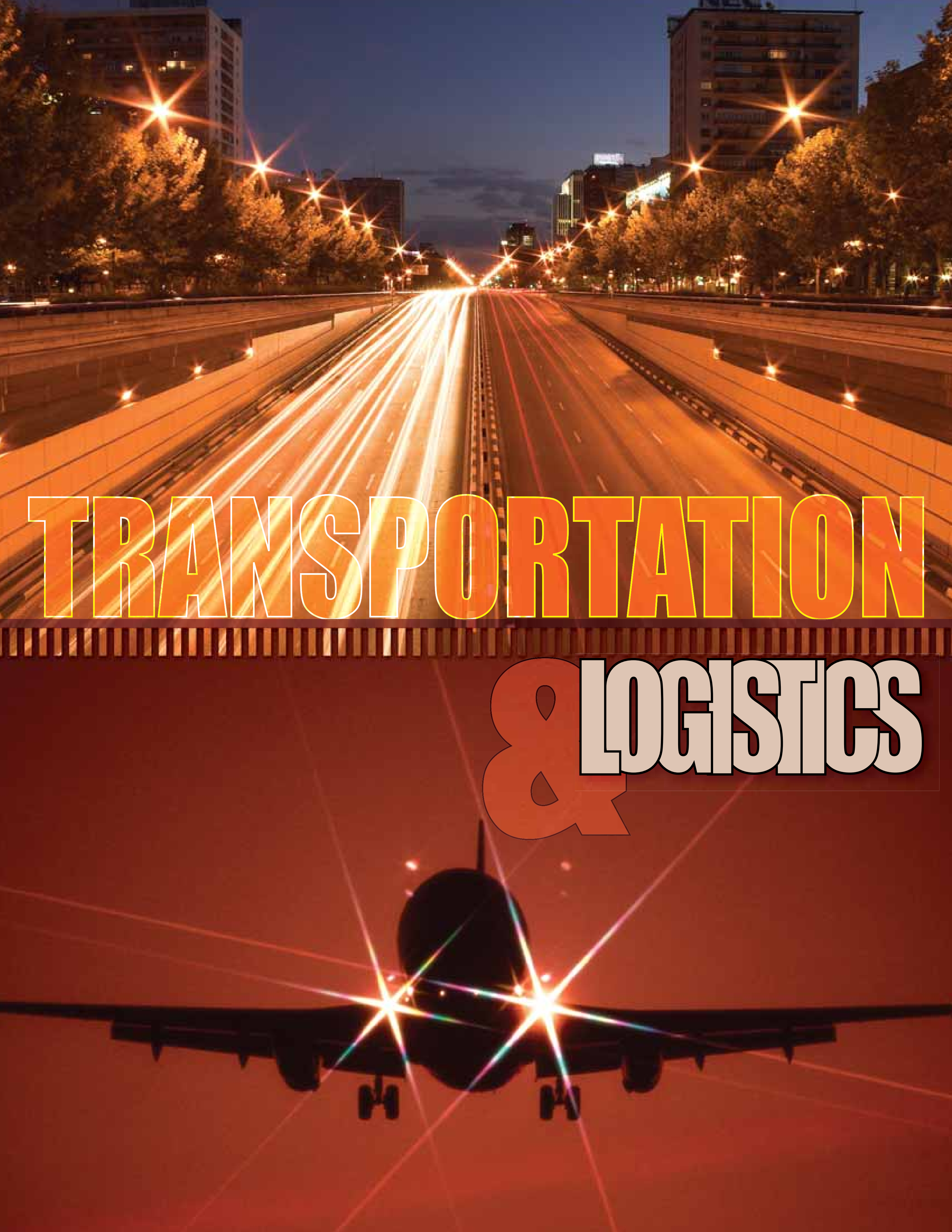
Great strides are being made at MU in pharmaceutical and health sciences. Cancer fighting radio-pharmaceutical drugs are produced using the university research reactor. Other types of drugs developed at MU treat acid reflux, ulcers, and liver and bone cancer.

The university's effective diagnostic methods and technologies enhance the early detection of breast cancer and HIV; and can reveal evidence of stroke and Alzheimer's disease through brain imaging. Researchers are also working on potential cures for muscular dystrophy, Type I diabetes, arthritis, heart disease, and joint degeneration.

Agricultural benefits are generated from plant science at MU. Researchers are improving crop yields by genetically engineering plants to withstand the effects from pests, disease, floods, and even droughts.

The technology incubator complements MU's research as a place to transition discoveries into marketable products. In the past year, 42 new inventions received a patent and more than 20 businesses were created with the help of university faculty. The University of Missouri-Columbia is not only a leader in research, but a major economic stimulus in the state.

TRANSPORTATION & LOGISTICS



Transportation • Logistics–Definition

The Transportation / Logistics cluster focuses on the support processes involved with the transfer of products and services. This cluster is comprised of Wholesalers, Logistical Services, Shipping Containers, Warehousing, Local Haulers, and Interstate/International Haulers.

Missouri's Strengths

Industries within the Transportation / Logistics cluster are enhanced by Missouri's waterways, rail, interstate highway system, and airports. Missouri is centrally located within the nation, making it a cost-effective place from which to ship and a natural place through which products are transported.

Freight Haulers

General and Specialized Freight (Long Haul) trucking is a large employer and an exporting industry in this cluster. Companies such as Yellow Freight and Prime Inc. are involved in this type of activity. Other important long haul industries include rail and inland water freight transportation. Inland water transportation has had the highest employment percentage growth in the cluster over the past five years. Short haulers and couriers are also large employers in the state. These companies may be based in Missouri or may be part of a global business and deliver freight from local hubs. United Parcel Service, Federal Express, and DHL Express are examples from this industry group. The Short Line Railroads sector within the short haul group had the second highest employment percentage growth in the cluster.

Warehousing

Other growth industries within the logistics segment in Missouri involve refrigerated warehousing, storage, and metal container manufacturing. As with freight haulers, warehousing may involve Missouri-owned businesses or be part of a national or global hub. Wal-Mart, Hallmark, Musician's Friend, and Associated Wholesale Grocers are included in this sector.

Wholesale

Another major employing industry is the wholesale sector. Industrial machinery merchant wholesalers are one of the largest in the group. Wholesale businesses, in large part, contribute to the overall exporting patterns of the Transportation / Logistics cluster. For this reason, Wholesale is highlighted later in this chapter as a major sub-cluster.

Key Locations

The largest Transportation / Logistics employing areas are located mainly in St. Louis, Kansas City, and Greene County. The highest employment growth areas include the I-44 corridor, the Ozarks region, the upper southeast, west central, south central and the northeast. Areas of high cluster concentration include the southwest, south central, north central, and counties along the Mississippi river.

Factoid:

- Missouri has 17 interstate routes, which total 1,180 miles.
- Interstate 70, which bisects Missouri, is the fifth longest interstate route *(2,153 miles from Cove Fort, Utah, to Baltimore, Maryland).*
- Barges haul 170 million tons of freight per year on the Mississippi River.

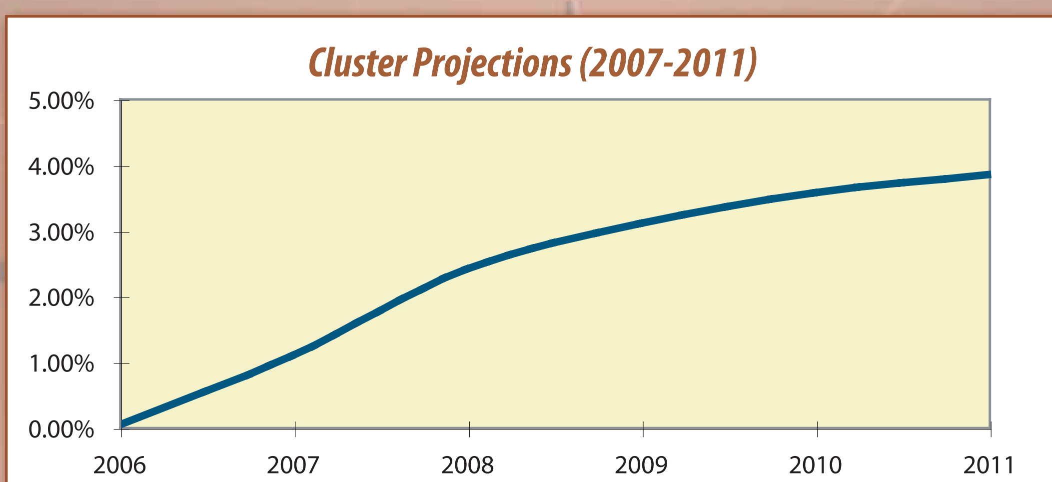
What's Next for Transportation?

The Transportation / Logistics cluster is by far the largest employing cluster with 7.6% of Missouri's total workforce. The term logistics pertains to the way firms organize themselves in relation to transportation, warehousing, inventories, customer service and information processing.

The phrase "advanced logistics" is shorthand for technologies and business processes that permit firms to reduce costs by substituting transportation, e-commerce and just-in-time deliveries for large inventories, multiple warehouses and customer service outlets. Firms can and do re-organize in response to transportation infrastructure improvements so as to reap the rewards of advanced logistics.

The four primary state transportation modes are roadways, air, rail, and water. Future large scale infrastructure improvements will mainly involve the highway system. The Missouri Department of Transportation is seeking to expand lanes on I-70 and I-44. The new I-64 in St. Louis will begin construction this spring and be completed by 2010. Other improvements including smoothing all of Missouri's highways, constructing new interstate connections to improve traffic flow, and possibly a new Mississippi river bridge are underway or in the planning stage.

The airline industry has gone through drastic organizational changes within the last few years. High fuel prices, labor costs, and heavy competition have forced many of the major carriers to bankruptcy. While Lambert Airport in St. Louis has lost a significant amount of jobs stemming from the reorganization of major carriers, Kansas City International has been increasing its passenger volume with nearly 10.6 million travelers in 2006. Other Missouri airports are also seeing passenger growth from regional carriers that focus mainly on heavy commuting destinations or popular vacation sites.



Cluster Statistics

- Number of Businesses (2006) 12,468
- Number of Jobs (2006) 175,064
- Percent of Total Missouri Jobs (2006) 7.62%
- Average Annual Wages (2005) $43,374
- Location Quotient (2006) 1.05
- Percent Change from 2001 Location Quotient 0.11%
- Net Percent Change in Jobs (2001-2006) 0.3%

- Total Change in Jobs (2001-2006) 446

Employment Change from 2001 attributed to:

- National Factors 4,482
- Industry Factors .... -2,178
- Missouri's Competitiveness .... -1,858

Top Five Industries

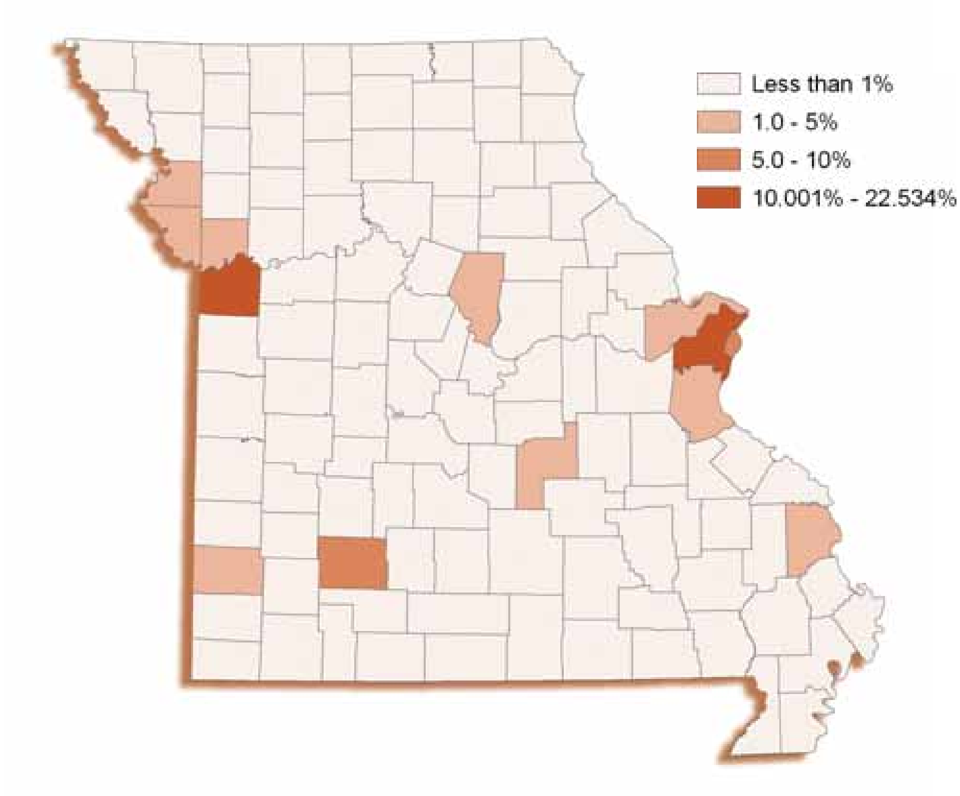
- General freight trucking, long-distance
- General warehousing and storage
- Couriers
- Specialized trucking, long-distance
- Industrial machinery merchant wholesalers

29.6% of Cluster Jobs

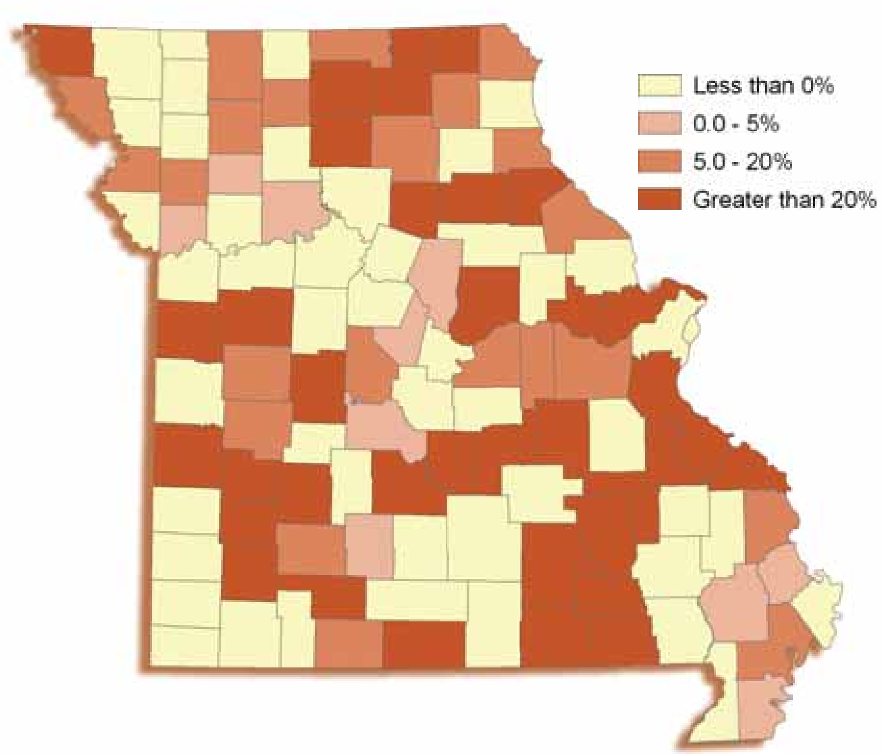
Targeted Occupations with Projected Growth and Current Wage

15% of Cluster Occupations	Current Wage	Projected Growth 2004–2014
Customer Service Representatives	$29,480	16.00%
Demonstrators and Product Promoters	$24,720	12.10%
General and Operations Managers	$92,330	11.50%
Maintenance and Repair Workers	$32,410	10.30%
Sales Representatives	$67,550	9.80%

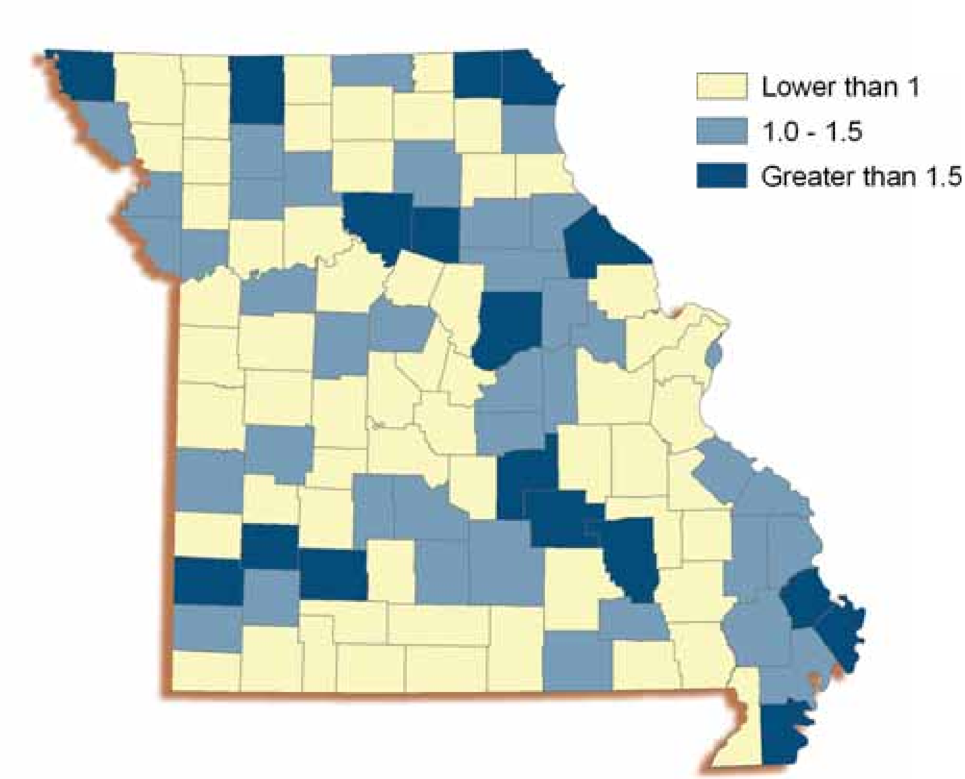
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



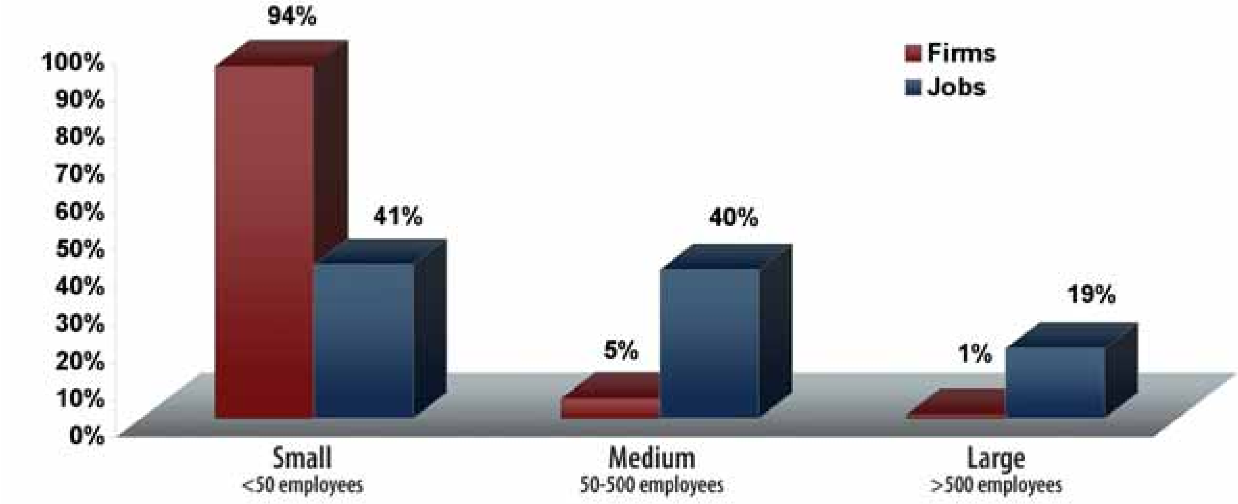
Location Quotient by County (2006)



Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
482112	Short line railroads	4.47	71.30%
484230	Other specialized trucking, long-distance	2.80	-3.56%
424520	Livestock merchant wholesalers	2.51	-1.89%
332439	Other metal container manufacturing	2.05	21.70%
424120	Office supplies merchant wholesalers	1.92	-10.02%
488210	Support activities for rail transportation	1.86	-10.95%
423110	Motor vehicle merchant wholesalers	1.82	6.30%
483211	Inland water freight transportation	1.81	187.40%
423620	Electric appliance merchant wholesalers	1.78	30.24%
424920	Book and periodical merchant wholesalers	1.73	7.23%
493120	Refrigerated warehousing and storage	1.71	18.02%
484121	General freight trucking, long-distance TL	1.71	-12.50%
424510	Grain and field bean merchant wholesalers	1.66	-1.82%
423820	Farm and garden equip. merchant wholesalers	1.62	3.11%
423520	Coal and other mineral merchant wholesalers	1.53	6.40%
423330	Roofing and siding merchant wholesalers	1.50	-5.94%
424430	Dairy product merchant wholesalers	1.46	0.12%
424710	Petroleum bulk stations and terminals	1.44	6.76%
424910	Farm supplies merchant wholesalers	1.43	-6.12%

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

332439	Other Metal Container Manufacturing
423110	Automobile and Other Motor Vehicle Merchant Wholesalers
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers
423130	Tire and Tube Merchant Wholesalers
423140	Motor Vehicle Parts (Used) Merchant Wholesalers
423210	Furniture Merchant Wholesalers
423220	Home Furnishing Merchant Wholesalers
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers
423320	Brick, Stone, and Related Construction Material Merchant Wholesalers
423330	Roofing, Siding, and Insulation Material Merchant Wholesalers
423390	Other Construction Material Merchant Wholesalers
423410	Photographic Equipment and Supplies Merchant Wholesalers
423420	Office Equipment Merchant Wholesalers
423430	Computer and Computer Peripheral Equipment and Software Merchant Wholesalers
423440	Other Commercial Equipment Merchant Wholesalers
423450	Medical, Dental, and Hospital Equipment and Supplies Merchant Wholesalers
423460	Ophthalmic Goods Merchant Wholesalers
423490	Other Professional Equipment and Supplies Merchant Wholesalers
423510	Metal Service Centers and Offices
423520	Coal and Other Mineral and Ore Merchant Wholesalers
423610	Electrical Apparatus and Equipment, Wiring Supplies, and Related Equipment Merchant Wholes
423620	Electrical and Electronic Appliance, Television, and Radio Set Merchant Wholesalers
423690	Other Electronic Parts and Equipment Merchant Wholesalers
423710	Hardware Merchant Wholesalers
423720	Plumbing and Heating Equipment and Supplies (Hydronics) Merchant Wholesalers
423730	Warm Air Heating and Air-Conditioning Equipment and Supplies Merchant Wholesalers
423740	Refrigeration Equipment and Supplies Merchant Wholesalers
423810	Construction and Mining (except Petroleum) Machinery and Equipment Merchant Wholesalers

423820	Farm and Garden Machinery and Equipment Merchant Wholesalers
423830	Industrial Machinery and Equipment Merchant Wholesalers
423840	Industrial Supplies Merchant Wholesalers
423850	Service Establishment Equipment and Supplies Merchant Wholesalers
423860	Transportation Equipment and Supplies (except Motor Vehicle) Merchant Wholesalers
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers
423920	Toy and Hobby Goods and Supplies Merchant Wholesalers
423930	Recyclable Material Merchant Wholesalers
423940	Jewelry, Watch, Precious Stone, and Precious Metal Merchant Wholesalers
423990	Other Miscellaneous Durable Goods Merchant Wholesalers
424110	Printing and Writing Paper Merchant Wholesalers
424120	Stationery and Office Supplies Merchant Wholesalers
424130	Industrial and Personal Service Paper Merchant Wholesalers
424210	Drugs and Druggists' Sundries Merchant Wholesalers
424310	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers
424330	Women's, Children's, and Infants' Clothing and Accessories Merchant Wholesalers
424340	Footwear Merchant Wholesalers
424410	General Line Grocery Merchant Wholesalers
424420	Packaged Frozen Food Merchant Wholesalers
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers
424440	Poultry and Poultry Product Merchant Wholesalers
424450	Confectionery Merchant Wholesalers
424460	Fish and Seafood Merchant Wholesalers
424470	Meat and Meat Product Merchant Wholesalers
424480	Fresh Fruit and Vegetable Merchant Wholesalers
424490	Other Grocery and Related Products Merchant Wholesalers
424510	Grain and Field Bean Merchant Wholesalers
424520	Livestock Merchant Wholesalers
424590	Other Farm Product Raw Material Merchant Wholesalers
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers
424690	Other Chemical and Allied Products Merchant Wholesalers
424710	Petroleum Bulk Stations and Terminals
424720	Petroleum and Petroleum Products Merchant Wholesalers (except Bulk Stations and Terminals)
424810	Beer and Ale Merchant Wholesalers
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers
424910	Farm Supplies Merchant Wholesalers
424920	Book, Periodical, and Newspaper Merchant Wholesalers
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers
424940	Tobacco and Tobacco Product Merchant Wholesalers
424950	Paint, Varnish, and Supplies Merchant Wholesalers
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers
481112	Scheduled Freight Air Transportation
481212	Nonscheduled Chartered Freight Air Transportation

482111	Line-Haul Railroads
482112	Short Line Railroads
483211	Inland Water Freight Transportation
484110	General Freight Trucking, Local
484121	General Freight Trucking, Long-Distance, Truckload
484122	General Freight Trucking, Long-Distance, Less Than Truckload
484220	Specialized Freight (except Used Goods) Trucking, Local
484230	Specialized Freight (except Used Goods) Trucking, Long-Distance
488111	Air Traffic Control
488119	Other Airport Operations
488190	Other Support Activities for Air Transportation
488210	Support Activities for Rail Transportation
488310	Port and Harbor Operations
488320	Marine Cargo Handling
488330	Navigational Services to Shipping
488390	Other Support Activities for Water Transportation
488490	Other Support Activities for Road Transportation
488510	Freight Transportation Arrangement
488991	Packing and Crating
492110	Couriers
493110	General Warehousing and Storage
493120	Refrigerated Warehousing and Storage
493130	Farm Product Warehousing and Storage
493190	Other Warehousing and Storage
541614	Process, Physical Distribution, and Logistics Consulting Services

Wholesale Subcluster–Definition

The Wholesale sub-cluster comprises firms involved in wholesaling merchandise, generally without transformation, and rendering services incidental to the sale of merchandise. The merchandise described in this sub-cluster includes the outputs of agriculture, mining, manufacturing, and certain information industries, such as publishing. The goods can be in the form of resale (retail or other wholesalers), durable non-consumer goods, or raw and intermediate materials and supplies used in production.

Missouri's Strengths

Wholesale is an integral industry group within the Transportation / Logistics cluster. A significant amount of shipping and warehousing comes from wholesale activity in the state.

Automotive

The largest employing industries in this sub-cluster supply the intermediate demands of the automotive sales industry. These wholesale industries include new motor vehicle parts, industrial machinery, electrical wiring, and automotive merchants. Graybar Electric, DRS Engineered Air Systems, and St. Louis Auto Auction are companies involved in automotive wholesale.

Energy

Energy wholesalers also have high employment growth and significant concentration within the state. These businesses include petroleum bulk stations and terminals, other petroleum merchants, coal, and other mineral merchants.

Agriculture

Another major employing industry and exporter is the agricultural wholesale group. Meat, grocery, dairy, livestock, grain, and field bean make up the top agricultural wholesale products. Farm equipment and supply companies are the top input wholesalers for agriculture. MFA, Sara Lee, Simmons Food, Purina, and Conagra Foods are considered agricultural wholesalers.

Others

Various other wholesale industries are nationally competitive including published materials, electrical and refrigerated appliances, and construction equipment. Scholastic Inc., Hallmark, MBS Textbook Exchange, Copeland, Marathon Electric, and Caterpillar are examples from this group.

Key Locations

The largest Wholesale employing areas are in St. Louis, Kansas City, and Greene County. The highest growth areas include the southwest, the Ozarks region, the upper southeast, central, south central and the northeast. Areas of high cluster concentration include the upper north and upper south counties.

Factoid:

- MBS Textbooks in Columbia Missouri processes more than 12 million new and used textbooks annually.
- Graybar, headquartered in St. Louis, was # 50 on Forbes' 2006 ranking of the 500 Largest Private Companies.
- Purina Mills has operated a 1,200-acre cattle research center in Gray Summit, Missouri since 1926.

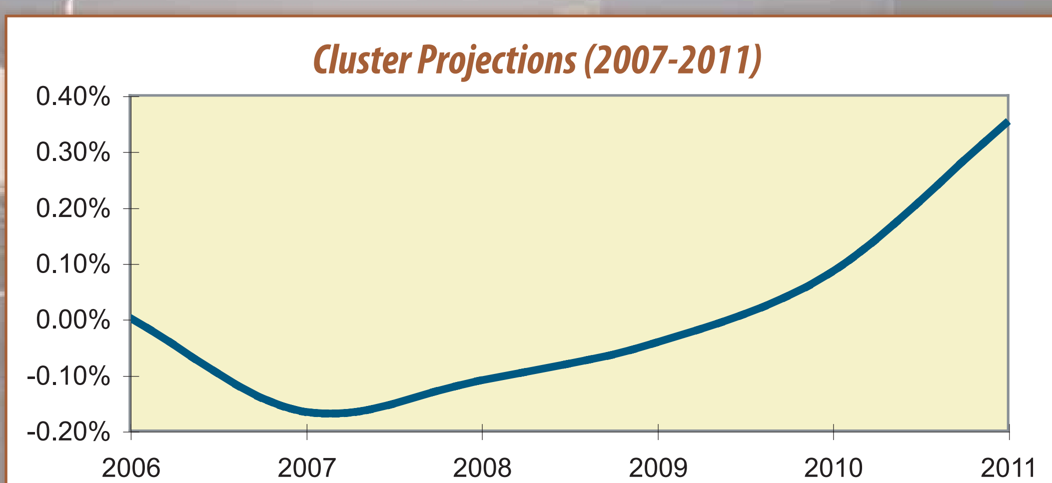
What's Next for Wholesale?

The Wholesale industry is a sub-cluster of the Transportation • Logistics cluster. It employs 4.5% of Missouri's workforce and is integral in the supply chain of every targeted cluster. Approximately 43 percent of all wholesale trading in the nation is within a 500 mile radius of Missouri.

Globalization and larger retail firms have increased demand for larger wholesale distributors. Companies are consolidating to meet the needs of these retailers. These consolidation trends are expected to slow employment gains in wholesale because duplicate jobs are often lost during the merging process.

New technologies, such as e-commerce and Electronic Data Interchange (EDI) are being incorporated by wholesale companies to increase sales and automate certain functions. The use of radio frequency identification (RFID) is important in inventory tracking and eliminates the need for manual bar code identification. As more companies adopt these tools, staffing patterns within the industry will likely change. Administrative support, customer service, sales, and bookkeeping functions are expected to decline. The need for computer specialists is expected to increase.

With the onset of new technologies which makes it easier to buy direct from manufacturers, wholesalers have to differentiate themselves from manufacturers by providing additional services including assembly, repair, and installation. Employment in these occupations is expected to increase.



Cluster Statistics

- Number of Businesses (2006) 7,759
- Number of Jobs (2006) 103,387
- Percent of Total Missouri Jobs (2006) 4.50%
- Average Annual Wages (2005) $47,152
- Location Quotient (2006) 1.00
- Percent Change from 2001 Location Quotient 2.48%
- Net Percent Change in Jobs (2001-2006) 0.2%
- Total Change in Jobs (2001-2006) 241

Employment Change from 2001 attributed to:

- National Factors 2,648
- Industry Factors .... -3,728
- Missouri's Competitiveness 1,322

Top Five Industries

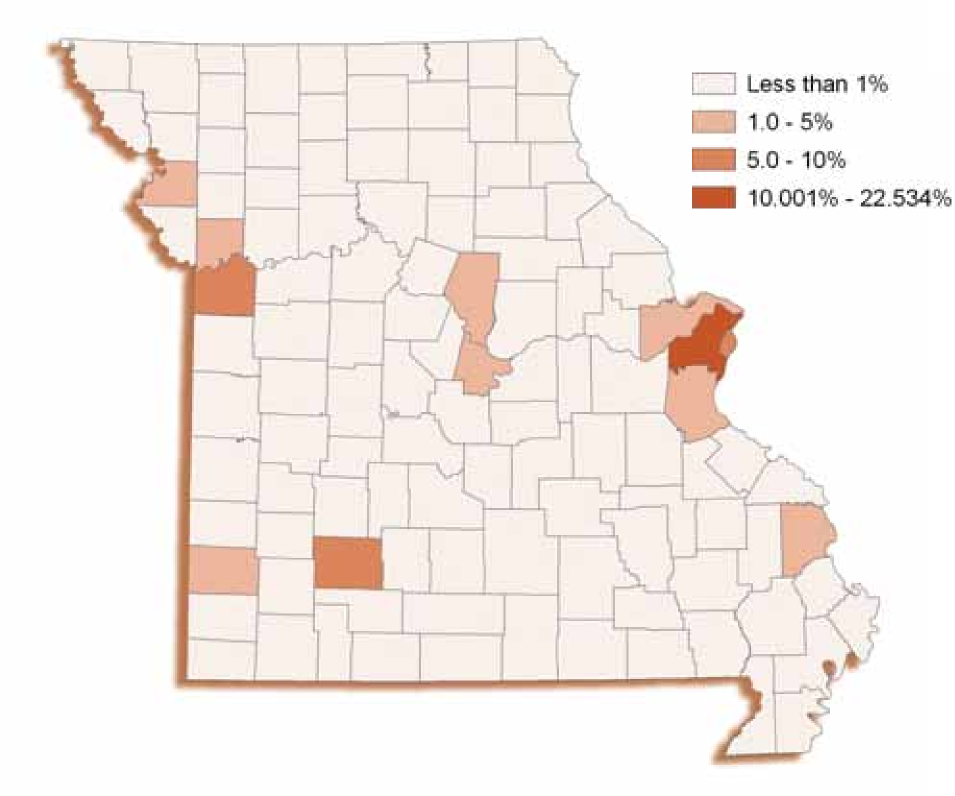
- Industrial machinery merchant wholesalers
- Grocery product merchant wholesalers
- Motor vehicle merchant wholesalers
- New motor vehicle parts merchant wholesalers
- Electrical equipment merchant wholesalers

24.4% of Cluster Jobs

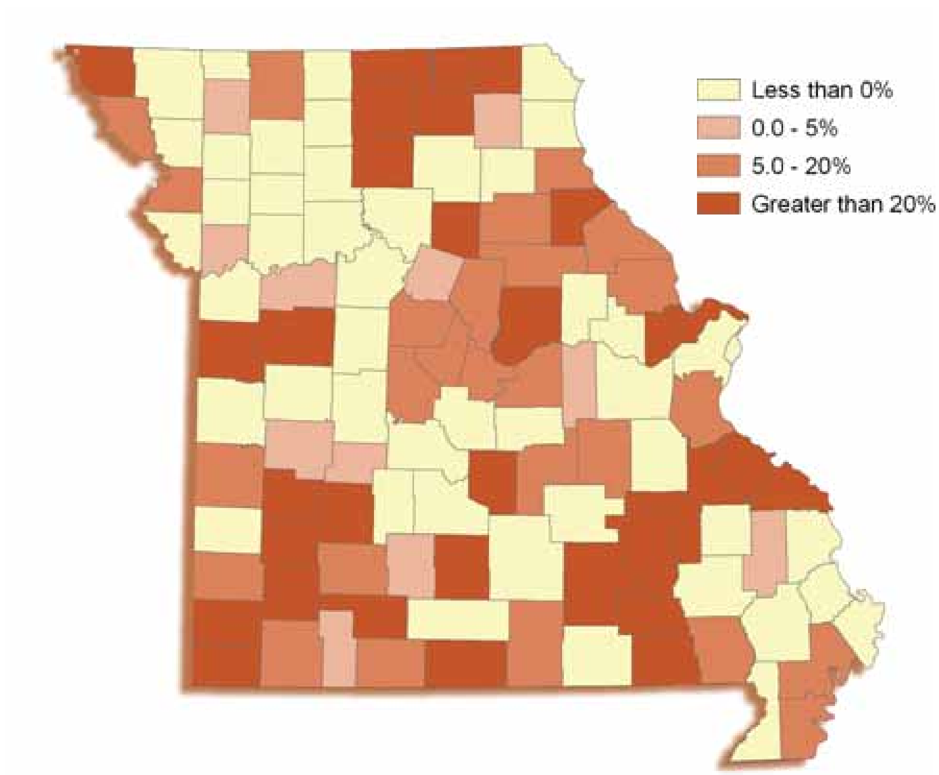
Targeted Occupations with Projected Growth and Current Wage

10% of Cluster Occupations	Current Wage	Projected Growth 2004–2014
Customer Service Representatives	$29,480	16.00%
Demonstrators and Product Promoters	$24,720	12.10%
General and Operations Managers	$92,330	11.50%
Maintenance and Repair Workers	$32,410	10.30%
Sales Representatives	$67,550	9.80%

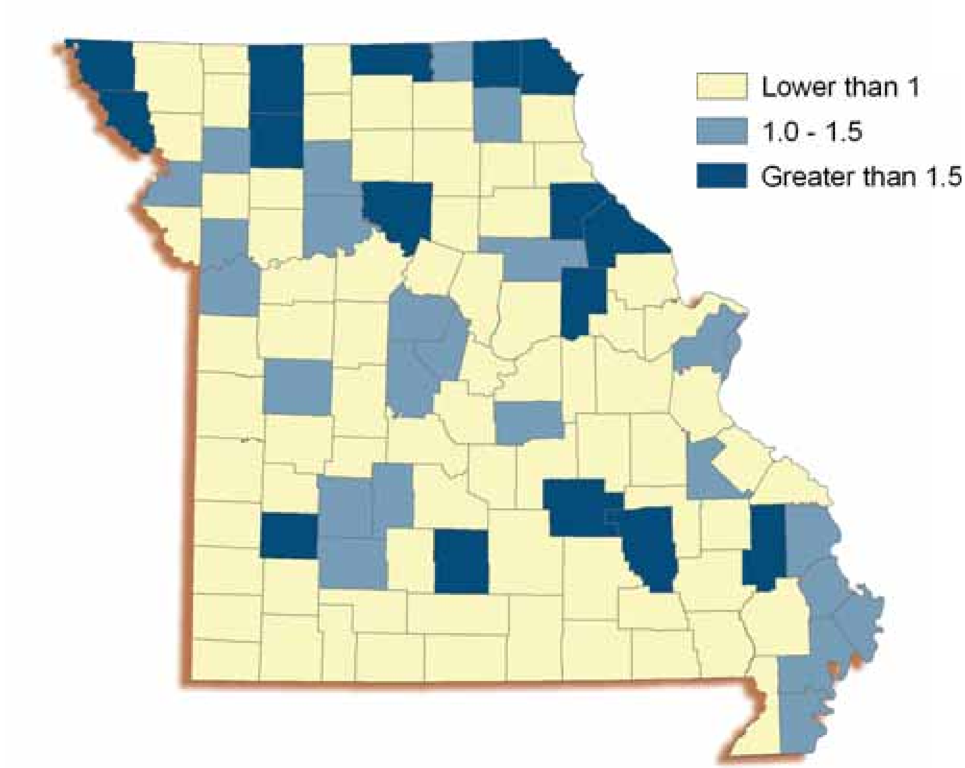
Employment Percentage by County (2006)



Employment Change by County (2001-2006)



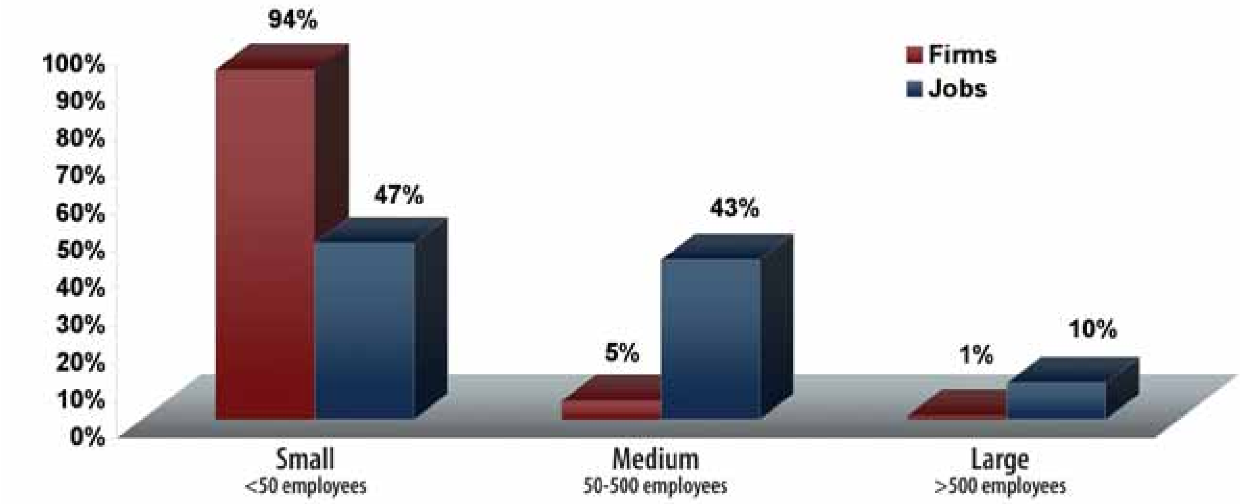
Location Quotient by County (2006)



Top Industries by 2006 Location Quotient (LQ) with Change from 2001 LQ

NAICS	Industry	2006 LQ	Percent Change
424520	Livestock merchant wholesalers	2.51	-1.89%
424120	Office supplies merchant wholesalers	1.92	-10.02%
423110	Motor vehicle merchant wholesalers	1.82	6.30%
423620	Electric appliance merchant wholesalers	1.78	30.24%
424920	Book and periodical merchant wholesalers	1.73	7.23%
424510	Grain and field bean merchant wholesalers	1.66	-1.82%
423820	Farm and garden equip. merchant wholesalers	1.62	3.11%
423520	Coal and other mineral merchant wholesalers	1.53	6.40%
423330	Roofing and siding merchant wholesalers	1.50	-5.94%
424430	Dairy product merchant wholesalers	1.46	0.12%
424710	Petroleum bulk stations and terminals	1.44	6.76%
424910	Farm supplies merchant wholesalers	1.43	-6.12%
423740	Refrigeration equip. merchant wholesalers	1.38	-11.71%
423120	New motor vehicle parts merchant wholesalers	1.31	9.93%
424590	Other farm product raw material merch. whls.	1.31	-5.15%
424490	Other grocery product merchant wholesalers	1.24	12.65%
423810	Construction equipment merchant wholesalers	1.24	6.30%
423610	Elec. equip. and wiring merchant wholesalers	1.21	22.60%
424720	Other petroleum merchant wholesalers	1.21	21.79%
424470	Meat and meat product merchant wholesalers	1.21	69.99%

Distribution of Firms and Jobs by Firm Size (2006)



NAICS industries included in targeted cluster

423110	Automobile and Other Motor Vehicle Merchant Wholesalers
423120	Motor Vehicle Supplies and New Parts Merchant Wholesalers
423130	Tire and Tube Merchant Wholesalers
423140	Motor Vehicle Parts (Used) Merchant Wholesalers
423210	Furniture Merchant Wholesalers
423220	Home Furnishing Merchant Wholesalers
423310	Lumber, Plywood, Millwork, and Wood Panel Merchant Wholesalers
423320	Brick, Stone, & Related Construction Material Merchant Wholesalers
423330	Roofing, Siding, and Insulation Material Merchant Wholesalers
423390	Other Construction Material Merchant Wholesalers
423410	Photographic Equipment and Supplies Merchant Wholesalers
423420	Office Equipment Merchant Wholesalers
423430	Comp & Comp Peripheral Equip. & Software Merchant Wholesalers
423440	Other Commercial Equipment Merchant Wholesalers
423450	Medical, Dental, & Hospital Equip & Supplies Merchant Wholesalers
423460	Ophthalmic Goods Merchant Wholesalers
423490	Other Professional Equipment and Supplies Merchant Wholesalers
423510	Metal Service Centers and Offices
423520	Coal and Other Mineral and Ore Merchant Wholesalers
423610	Elec. Apparatus/Equip, Wiring Supplies, & Related Equip Merchant Wholes
423620	Electrical/Electronic Appliance, TV, & Radio Set Merchant Wholesalers
423690	Other Electronic Parts and Equipment Merchant Wholesalers
423710	Hardware Merchant Wholesalers
423720	Plumbing/Heating Equip & Supplies (Hydronics) Merchant Wholesalers
423730	Warm Air Heating & AC Equip and Supplies Merchant Wholesalers
423740	Refrigeration Equipment and Supplies Merchant Wholesalers
423810	Const&Mining (except Petroleum) Machinery&Equip Merch Wholesalers

423820	Farm and Garden Machinery and Equipment Merchant Wholesalers
423830	Industrial Machinery and Equipment Merchant Wholesalers
423840	Industrial Supplies Merchant Wholesalers
423850	Service Establishment Equipment and Supplies Merchant Wholesalers
423860	Transportation Equip&Supplies (except Motor Vehicle) Merch Wholesalers
423910	Sporting and Recreational Goods and Supplies Merchant Wholesalers
423920	Toy and Hobby Goods and Supplies Merchant Wholesalers
423930	Recyclable Material Merchant Wholesalers
423940	Jewelry, Watch, Precious Stone&Precious Metal Merchant Wholesalers
423990	Other Miscellaneous Durable Goods Merchant Wholesalers
424110	Printing and Writing Paper Merchant Wholesalers
424120	Stationery and Office Supplies Merchant Wholesalers
424130	Industrial and Personal Service Paper Merchant Wholesalers
424210	Drugs and Druggists' Sundries Merchant Wholesalers
424310	Piece Goods, Notions, and Other Dry Goods Merchant Wholesalers
424320	Men's and Boys' Clothing and Furnishings Merchant Wholesalers
424330	Women's/Children's/Infants' Clothing&Accessories Merch Wholesalers
424340	Footwear Merchant Wholesalers
424410	General Line Grocery Merchant Wholesalers
424420	Packaged Frozen Food Merchant Wholesalers
424430	Dairy Product (except Dried or Canned) Merchant Wholesalers
424440	Poultry and Poultry Product Merchant Wholesalers
424450	Confectionery Merchant Wholesalers
424460	Fish and Seafood Merchant Wholesalers
424470	Meat and Meat Product Merchant Wholesalers
424480	Fresh Fruit and Vegetable Merchant Wholesalers
424490	Other Grocery and Related Products Merchant Wholesalers
424510	Grain and Field Bean Merchant Wholesalers
424520	Livestock Merchant Wholesalers
424590	Other Farm Product Raw Material Merchant Wholesalers
424610	Plastics Materials and Basic Forms and Shapes Merchant Wholesalers
424690	Other Chemical and Allied Products Merchant Wholesalers
424710	Petroleum Bulk Stations and Terminals
424720	Petro&PetroProducts Merch Wholesalers (except.Bulk Stations&Terminals)
424810	Beer and Ale Merchant Wholesalers
424820	Wine and Distilled Alcoholic Beverage Merchant Wholesalers
424910	Farm Supplies Merchant Wholesalers
424920	Book, Periodical, and Newspaper Merchant Wholesalers
424930	Flower, Nursery Stock, and Florists' Supplies Merchant Wholesalers
424940	Tobacco and Tobacco Product Merchant Wholesalers
424950	Paint, Varnish, and Supplies Merchant Wholesalers
424990	Other Miscellaneous Nondurable Goods Merchant Wholesalers

Is the Container Half-Full or Half-Empty?

The growth of two cost-saving technologies, just-in-time deliveries and containerization, are creating new challenges for logistics firms throughout the country. These two technologies are changing the way businesses run and can sometimes be at odds with each other. Just-in-time delivery lowers inventory costs for manufacturers and retailers but creates higher transportation costs as trucks run half-full to deliver goods quickly. This is fine when oil is inexpensive but can quickly increase costs when fuel prices spike.

Containerization, the complete loading of standardized, inter-modal 40 ft. containers with anything from soybeans to car parts, creates massive efficiencies that have greatly lowered the costs of global trade. Although not a new concept with international ship lines, containerization is taking hold on the highways and railways of the U.S. There are few things a shipper dislikes as much as a half-empty container. Containerization requires full loads to maintain cost savings yet that is sometimes at odds with just-in-time methods.

Fortunately, new technologies may help with this dilemma. Just-in-time delivery, coupled with high fuel prices, has increased the cost of travel delays and congestion for most logistics companies. In response, mid to small-sized shippers are beginning to look at route optimization software that companies like UPS have pioneered. This software, combined with GPS technology, sends truck fleets on the most efficient travel routes where situations like congested roadways and left-hand turns are avoided.

The Internet may help with the problem of "backhauls," where long-distance shippers face empty trailers on the return trip from a delivery. Logistics companies can use online communications to let businesses know when and where empty trucks will be available to transport goods. The Internet provides a great opportunity for these two markets to gain from the flow of information. Shippers get to maximize loads and revenue while producers gain access to lower cost transportation options.

Data

This report is provided by the Missouri Economic Research & Information Center (MERIC), within the Missouri Department of Economic Development. The data is primarily based on the most recent Quarterly Census of Employment and Wages (QCEW) available from the U.S. Bureau of Labor Statistics (BLS) using the North American Industry Classification System (NAICS). Another source of data is the most recent survey of Occupational Employment Statistics (OES), also from BLS. Both of these BLS programs are managed by the Labor Market Information unit, located within MERIC.

Targeted Industry Clusters

Clusters identified within this report are defined using six digit NAICS codes. The cluster definitions are based on MERIC research and developed in coordination with the Division of Business and Community Services (BCS), within the Missouri Department of Economic Development. MERIC research examined major competitive industries in Missouri, recent cluster studies, national trends, and information from other states with similar industry strengths. Industry groupings were based on supply-chain theory, which includes both supplier and user industries surrounding core products and services. The Division of Business and Community Services (BCS) evaluated the industry groupings in terms of marketability, recruitment potential, and sustainability. The Department of Economic Development approved eight industry clusters for targeting purposes: Agribusiness, Automotive, Information Technology, Energy, Finance, Life Science, Transportation / Logistics, and Defense / Homeland Security.

Sub-Clusters

Industries within larger employing clusters were grouped based on NAICS similarity and analyzed as sub-groups or sub-clusters. This report highlights specific sub-clusters with significant growth trends, competitiveness, and target potential: Investment and Financing within the Finance cluster and Wholesale as a sub-cluster of Transportation / Logistics.

Source Information

North American Industrial Classification System (NAICS)

Industries within each cluster are identified by a six digit classification code and title description using the NAICS coding system. NAICS (pronounced "nakes") is the North American Industry Classification System. NAICS is an industry classification system that groups establishments into 1,170 industries based on their primary economic activity. NAICS replaces the Standard Industrial Classifications (SIC). NAICS was developed jointly by the U.S., Canada, and Mexico to provide comparability in statistics about business activity across North America.

Industry Data

Data for the cluster statistics, industry employment, location quotients, distribution of firms, and county level employment is obtained from the Quarterly Census of Employment and Wages in cooperation with the Bureau of Labor Statistics (BLS). Location quotient and shift share analysis was calculated using the BLS Regional Data Analysis Tool (RDAT).

Cluster Occupations

The five cluster occupations are based on top employment in the cluster, education and training requirements, and highest projected percentage growth.

Occupations for each industry cluster are derived from the Bureau of Labor Statistic's Occupational Employment Statistics (OES) survey program. The OES survey identifies staffing pattern concentrations for each industry. A percentage distribution of staffing is then applied to industry employment to obtain occupational employment data. Current wages are based on statewide occupational estimates from the OES survey. Occupational projections are supplied by MERIC Long Term Projection Analysis. Occupational education and training information are obtained from the Bureau of Labor Statistics.

Employers

Company names and associated NAICS industry codes mentioned throughout the text are provided by the InfoUSA database and Fortune 500. InfoUSA, a privately owned data collection source, is independent from the BLS program. Data obtained from InfoUSA is free from confidentiality restrictions.

Other Sources

- City of St. Louis
- Federal Communications Commission
- Graybar
- Iowa State University
- Kansas City International Airport
- Missouri Department of Natural Resources
- Missouri Textbook Exchange
- Purina Mills
- University of Missouri-Columbia: Office of Research
- U.S. Department of Agriculture: Nat'l Agri Statistics Svc (NASS)
- U.S. Department of the Interior: Office of Surface Mining
- Energy Information Administration
- Fort Leonard Wood
- Hamline University
- Kansas City Federal Reserve Bank
- Milken Institute
- Missouri Department of Transportation
- Pew Initiative on Food and Biotechnology
- University of Missouri: Office of the President
- U.S. Bureau of Labor Statistics
- U.S. Department of Defense
- U.S. Mint

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